

Chapter 6

CONSERVATION AND OPEN SPACE ELEMENT

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CONSERVATION AND OPEN SPACE ELEMENT

I. INTRODUCTION

The Conservation and Open Space Element guides the long-range preservation and conservation of the County's natural resources and open space land, and sets policy direction for the open space, natural and energy-related resources of unincorporated Los Angeles County. This Element covers the following issues:

- Open space resources;
- Parks and recreation amenities;
- Biological resources;
- Agricultural resources;
- Mineral resources, renewable energy, and energy conservation;
- Scenic resources;
- Historical and cultural resources; and,
- Water resources.

The open space and natural resources of the County are a vital part of maintaining a high quality of life for County residents and businesses. The County is fortunate to have an abundance of natural resources and amenities despite continued population and economic growth. The Conservation and Open Space Element's policies are based on the need to conserve natural resources while also meeting the public's desire for open space experiences and long-term use of resources. Los Angeles County is heavily urbanized, and most of the undeveloped land that remains is within the unincorporated areas of the County. As such, the County is regarded as the steward to the County's remaining open space areas and seeks to appropriately preserve and protect this land from inappropriate development patterns.

The Conservation and Open Space Element provides strategic direction for implementing a common conservation vision for Los Angeles County. Through a stakeholder process that encompasses public input, educational awareness, and collaborative multi-agency, public-private partnership efforts, the Element establishes policies for:

- Developing the open space and parkland footprint, setting goals for preserving and managing open space, and identifying opportunities for inventory expansion through acquisition, conservation/recreation easements, development rights transfer, land trusts, and/or joint use arrangements;
- Addressing pressing issues involving water (flood control, water pollution, and groundwater recharge), air pollution, and land use (erosion, forest conservation, and agricultural preservation) through coordinated programs and multi-benefit projects with local agencies, conservancies, and private entities;
- Protecting natural resources including open space, scenic vistas, archeological/historic sites, waterways, riparian habitats, and wildlife migration corridors;
- Promoting public health and welfare by increasing accessibility to and connectivity between outdoor recreation systems comprised of parks and open space linked through trails, river corridors, and greenways that provide both active and passive recreation opportunities; and,
- Leveraging limited funds through shared financing of multi-benefit projects to accomplish multiple resource conservation and preservation goals.

California requires General Plans to cover a multitude of topics related to Conservation and Open Space. Table 6.1 is an index of those topics and the related section under which they are covered.

II. OPEN SPACE, PARKS, AND RECREATION

Open Space

Open space refers to both public and private lands and waters that are preserved in perpetuity or for long-term open space and recreational uses. Existing open spaces in the County include national forests, state, county, and city parks, and nature preserves. Open spaces also include recreational uses such as golf courses and beaches, and other private open space lands, including green urban rooftops.

Several agencies share the goal of managing open space and natural areas in the County. The U.S. Forest Service and the U.S. Bureau of Land Management (BLM) manage one million acres of primarily forestland. The California State Parks Department manages over 100,000 acres of mostly wildlife and wildflower preserves, and the Los Angeles County Department of Beaches and Harbors operates 1,500 acres of public beaches along the County coastline. Finally, the Los Angeles County Department of Parks and Recreation (DPR) has the primary responsibility of providing local and regional recreational areas to County residents. The Department of Parks and Recreation is discussed in more detail in the Parks and Recreation section below.

Table 6.1: Required Topics Covered by the Conservation and Open Space Element

Required Topics	Covered in Conservation & Open Space Element	Covered in Other Elements
Open Space Resources	✓	-
Agriculture and Soil Resources	✓	-
Air Quality		Air Resources Element
Biotic Resources (SEAs)	✓	-
Cultural and Historic Resources	✓	-
Landslide and Debris Flow		Safety Element
Fire Risk Areas		Safety Element
Energy Resources	✓	-
Flood Plains		Safety Element
Forest Resources and Timber	✓	-
Harbors & Marinas		Mobility Element
Scenic Hillside Areas	✓	-
Flood Inundation Zones		Safety Element
Minerals and Aggregate Resources	✓	-
Plants and Animals – Wildlife Habitat	✓	-
Reclamation of Land	✓	-
Reclamation of Water		Public Services & Facilities
Recreation Areas (Parks and Trails)	✓	-
Scenic Highways	✓	-
Soil Instability, Landslides and Erosion		Safety Element
Water Resources	✓	-
Groundwater Basins and Recharge	✓	-
Rivers & Other Waters	✓	-
Water Resources Supply		Public Services & Facilities
Water Quality	✓	-
Watershed Conservation	✓	-
Wetlands	✓	-
Fisheries	n/a	-

Table 6.2 shows a summary of the County’s open space in acres by category. Following are the designated open space and natural areas for Los Angeles County:

- **Water Bodies:** Lakes, rivers, ocean shoreline, aqueducts, and lagoons;
- **National Forests;**
- **Federal Land:** BLM, portions of the Santa Monica Mountains, National Recreation Areas, National Park Service land, and U.S. Army Corps of Engineers Whittier Narrows and Santa Fe Dam Recreation Areas;
- **State Land:** State parks and conservancy lands;
- **County Land:** County Parks, County Recreation areas, Wildflower Preserves, Wildlife Sanctuaries, Natural Areas, and Multi-Use Trails;
- **Other Park and Conservancy Land:** Private recreation areas, private deed restricted open space, ownership by cities, and beaches;
- **Golf Courses:** Public and private; and,
- **Other Open Space:** Flood management facility/district, aqueduct open space, and transitional open space.

Table 6.2: Summary of Unincorporated L.A. County Open Space

Open Space Categories	Acres
Inland Water Bodies	6,937.85
National Forests	664,815.69
Federal Land	11,675.95
Bureau of Land Management Land	12,837.56
State Lands	49,764.35
County Parkland and Recreation Areas	8,835.46
Other Park & Local Conservancy Land	55,106.74
Golf Courses	1,319.68
Other Open Space	10,036.58
Total Open Space Acreage	821,329.58

Source: Los Angeles County Department of Regional Planning GIS Section

Open Space Policy Map

The Open Space Policy Map aids decision-makers in identifying and maintaining these lands and water bodies in an open state for public recreation, scenic enjoyment, resource production, and for the protection and study of natural ecosystems. As with any policy map, the Open Space Policy

Map should be used in conjunction with other policy maps or special designations, which identify such features as floodplains, hillside management areas, earthquake fault zones and potential landslide and liquefaction areas. Figure 6.1 shows all of the open space areas of unincorporated Los Angeles County.

Open Space Easements and Dedications

The California Open Space Easement Act of 1969 sets forth general conditions governing the creation of recognized open space easements. Agreements or contracts establishing such easements specify the standards and conditions for uses and activities permitted within the area covered.

For the purposes of the General Plan, open space dedications are defined as privately owned lands that have been set aside for permanent open space as part of a larger land development proposal. Commitment of such lands to open space use in perpetuity is typically assured through deed restrictions or dedication of construction rights, secured at the time of development permit approval. Within

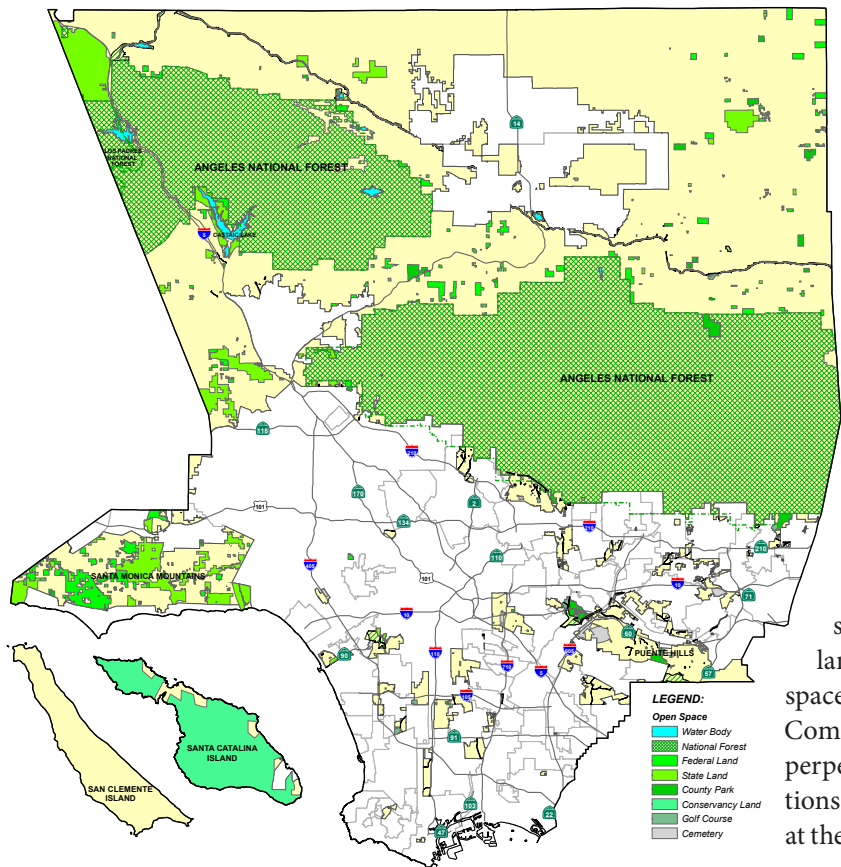


Figure 6.1: L.A. County Open Space

dedicated open space areas, standards and conditions for use are specifically set forth as conditions of the zoning permit or subdivision tract map. Area and community plans may further refine open space easement policy as necessary.

Joint Use Agreements

Joint Use Agreements are created between the County and other entities, usually a school district, for programming County recreational uses where such uses do not conflict with school recreational programming in exchange for County funding for recreational improvements. Lands under the jurisdiction of other County Departments can also be developed where such arrangements do not conflict with the property or regulatory restrictions of those Departments.

Multi-Benefit Parks and Open Space

Multi-benefit parks and open spaces are created through collaborative efforts among entities such as city, county, state, and federal agencies, private organizations, schools, private landowners, and industries. For example, parks and open spaces, when designed as a site for the natural



Open Space, Antelope Valley

treatment of water, flood control, and effective groundwater recharge, can achieve the combined goals of increasing the amount of parkland and conserving water resources. Riparian area protection and wetland conservation areas can be designed not only to increase recreational opportunities, but also to enhance water quality and quantity.

The connectivity of parks and open space for wildlife corridors and pedestrian access also can provide multiple benefits. When parks are well connected to communities by pedestrian pathways and public transportation, there can be a reduction of traffic which also produces an improvement in air quality and ultimately public health.

Parks and Recreation Resources

The County's vast park and recreational resources include local and regional parks, natural habitat areas, sports facilities, playgrounds, gardens, golf courses, trails, and beaches. Recreational resources in the County are divided into three general categories. However, the traditional template of local and regional parks has been expanded to capture diverse opportunities for acquisition and development of parkland. The types of parks, recreational areas, and facilities in the County are as follows:

Open Space Nodes

Open Space Nodes are small pieces of open space that serve as public destination, connection, and community defining spaces. Nodes provide physical and visual breaks



Michillinda Neighborhood Park, East Pasadena

to the urban landscape and/or connect various spaces such as waterways, streets, trails, and greenways. Open space nodes are used as gathering and rest areas, and serve as opportunities for social, cultural, and community exchange. Examples of open space nodes include: equestrian and hiking trail heads, bike rest stops and/or stations with lockers and repairs, neighborhood focal points, and passive amenities such as plazas, rest areas, playgrounds, landmarks, and public art installations.

Pocket Parks

Pocket parks are small pieces of parkland that serve a residential or business area within a one-quarter mile radius. Pocket parks are often developed on urban infill sites in park-poor communities. In general, pocket parks serve a passive need and do not have on-site parking.



Community Park - Lennox

Neighborhood Parks

Neighborhood parks provide space and recreation activities for the immediate neighborhoods in which they are located. The common objective of all neighborhood parks is to bring people together to recreate and socialize close to home. A neighborhood park is centrally located within the neighborhood and is accessible via sidewalks or trails. The service area of a neighborhood park is typically one-quarter to one-half mile uninterrupted by major roads and other physical barriers. A reasonable walking distance is critical to a person's likelihood of utilizing a neighborhood park.

Community Parks

Community Parks protect natural resources, preserve open spaces, and provide recreational facilities that are not available in neighborhood parks. Community parks accommodate large group activities and special events, are accessible by arterial and collector streets, and provide off-street parking. Facilities usually provided in community parks are recreation centers, gymnasiums, cultural activity facilities, and restroom facilities. Community parks also provide both active and passive recreational opportunities. Active use recreation facilities may include large play structures, sport courts, athletic fields, and swimming pools. Passive use facilities may include trails, individual and group picnic areas, open recreation areas, and unique landscape features.

Regional Parks

Regional parks are generally defined as large multi-use areas that can include woodland, wetland, and water bodies with some formalized, active recreation facilities that benefit the surrounding regional area. Regional parks contain specialized recreational facilities that are not otherwise generally available within local or community parks.

Trails

County trails offer a wide range of opportunities for multiple recreational/educational uses including nature based hiking and wildlife viewing, jogging, bicycling, and equestrian use. Trails provide linkages to existing parks, pedestrian paths, parkways, and river shoreline connections.

Greenways

Greenways provide a linear area of open space along natural corridors, and often follow features such as rivers, but may also follow man-made waterways, drainage channels, and utility easements. Greenways can accommodate various

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modes of uninterrupted pedestrian travel on pathways including walking, jogging, and bicycling, and can include recreation areas and natural landscape features.

Special Use Facilities

Special use facilities are generally single purpose facilities that serve a greater regional recreational or cultural need in the County. One notable example of a County special use facility is the Hollywood Bowl. Special use facilities require adequate public access and adequate buffers to protect adjacent residential users and to insulate the park from commercial or industrial development. Special use facilities can provide both passive (e.g. wilderness parks, nature preserves, botanical gardens, and nature centers) and active (e.g. performing arts, water parks or aquatic facilities, skate parks, and golf driving ranges and courses) needs within the region. There is no size criteria or service area associated with Special Use Facilities.

Historic and Cultural Facilities

Historic and cultural facilities have been established to protect and promote the historic and cultural heritage of the County. Historical and cultural facilities include museums, archeological areas, and landscapes of historic and cultural significance. Some of these facilities are listed or may be eligible to be included on the National Register of Historic Places.

Natural Areas and Habitat Preservation Areas

Natural areas and habitat preservation areas contain land that is predominantly untouched, in a natural condition, and that have a high conservation value. Each natural area has a unique identity resulting from the interaction of wildlife, landforms, geology, land use, and human impact. The primary purpose of natural and habitat preservation areas is to protect and conserve outstanding, unique, or representative ecosystems, native plant species, animal species, or natural phenomena. Natural areas and habitat preservation areas generally have few visitor facilities, such as picnic areas, lookouts, and walking trails.

Multi-Benefit Facilities

Multi-benefit facilities are characterized as having more than one function and contributing to multiple program goals. A watershed, for example, may protect critical wildlife habitats, preserve open space, and provide trails for recreation while contributing to water conservation objectives. Utility corridors and flood control basins may also serve as areas for active or passive recreation.

Arboreta and Botanic Gardens

Arboreta and botanic gardens are facilities where a wide variety of plants, trees, and shrubs are cultivated for educational, scientific, and ornamental purposes. These facilities may offer a variety of classes, programs, expositions, seminars, lectures, and other educational resources for people of all ages.

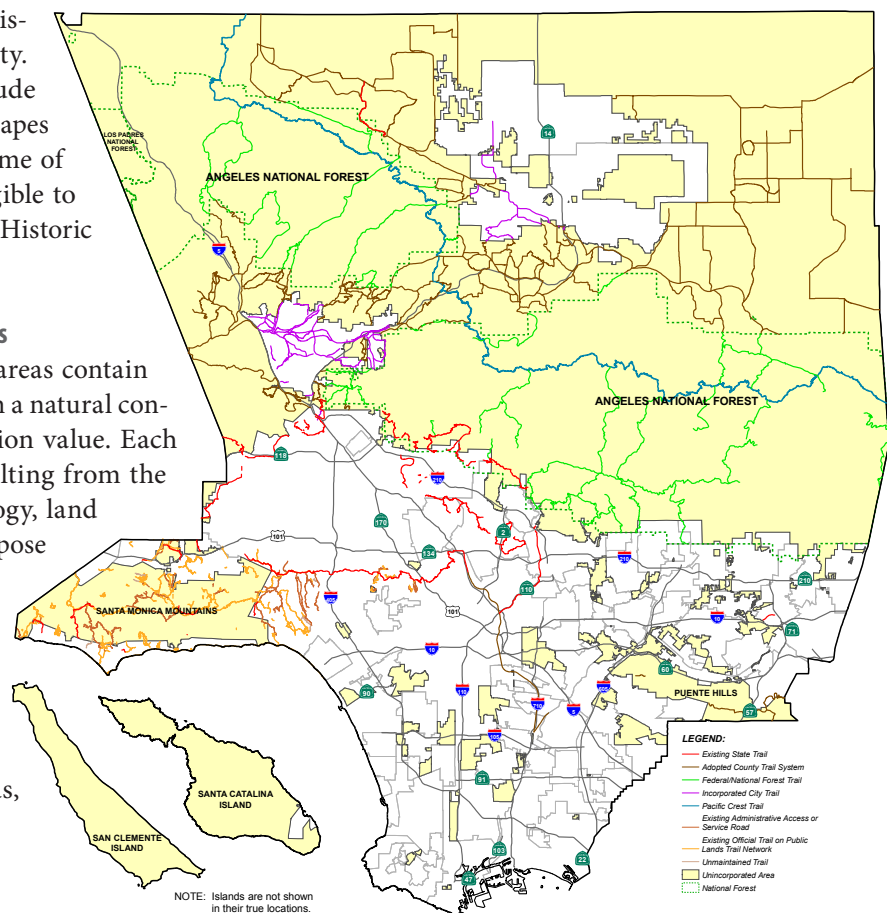


Figure 6.2: L.A. County Trail Network



Descanso Gardens

Los Angeles County Department of Parks and Recreation

The County Board of Supervisors (BOS) funds County park development, and the Department of Parks and Recreation oversees local and community parks in both incorporated and unincorporated County areas. In addition, the County operates several large, regional parks and recreation areas such as Castaic Lake Recreation Area, Frank G. Bonelli Regional Park, the Whittier Narrows Recreation Area, Santa Fe Dam Recreation Area, the Kenneth Hahn Recreation Area, and four (4) arboreta and botanic gardens as well as many natural areas and wildlife sanctuaries. The Department of Parks and Recreation also has jurisdiction over 19 golf courses on 17 sites located throughout the County, and maintains over 300 miles of multipurpose riding and hiking trails.

The County standard for the provision of parkland is four (4) acres of local parkland per 1,000 residents of the County's unincorporated population, and six (6) acres of regional parkland per 1,000 residents of the County's total population.

Los Angeles County Park Plans

In April 2004, the Department of Parks and Recreation produced the Strategic Asset Management Plan for 2020 (SAMP). The Department recognized the growing need for park and recreation resources to serve the growing population of the County. The SAMP inventoried County park and recreation needs by supervisorial district, made recommendations for meeting park and recreational needs, and provided a policy guide for park development throughout the County. Based on County standards for parkland and projected population growth, the SAMP report found that by 2020 the County will be approximately 4,600 acres short of the desired four (4) acres of local parkland per 1,000 County residents. In contrast, the County as a whole is projected to have an 11,684-acre surplus of regional parkland based on the six (6) acres per 1,000 County residents standard. This is in large part due to the magnitude of natural areas in District 5 (northern Los Angeles County). However, at a district by district level, the other four supervisorial districts will be deficient in regional parkland by the year 2020.

The SAMP provides a detailed analysis of parkland and open space issues on a district level, and recommends policy direction for where the County should implement resources to prevent future deficiencies in parks and open space. Further information on the Department of Parks and Recreation can be found on their website at <http://lacountyparks.org/>.



Kenneth Hahn State Recreation Area, Baldwin Hills

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Park Ranger, Devil's Punchbowl Natural Area

Park Planning and Development

During the last 25 years, a number of cities in the County incorporated, and existing cities annexed additional unincorporated areas. These jurisdictional changes resulted in the County transferring ownership of more than 50 local parks and park sites to incorporated cities.

Local parks are often established through Specific Plans or large residential developments by utilizing the Quimby Act. The Quimby Act assists local governments in creating local parkland by requiring that a residential developer either: a) dedicate 3 acres of a new project site per 1,000 residents to parkland, b) pay fees that will be used to acquire, develop, or rehabilitate parkland in that general vicinity, or c) a combination of dedication and/or fees. In many instances, local parkland is dedicated to the County by the developer, but often the Department of Parks and Recreation foregoes land for an “in lieu” fee. The Quimby Act provides funds only for the acquisition of land for parks, development of new parks, or rehabilitation of existing parks. The Quimby Act, however, does not provide funds for the operations and maintenance of parks. Part 4 of Title 21 of the County Code details the process for local parkland dedication and/or in lieu fees for County park development.

Park Planning Issues

Within the unincorporated areas of the County there are over 800,000 acres of regional recreation areas and about 650 acres of local parkland. However, the vast majority of

regional recreation areas are outside of core urban areas where there is insufficient local parkland. Public access to parks and recreational areas is also an issue, as visiting scenic and remote areas such as the Angeles National Forest and Santa Monica Mountains poses particular transportation challenges, especially for residents with special needs.

The acquisition of recreational sites in urban areas is limited due to land availability, the high cost of land, and site contamination of urban undeveloped parcels. For these reasons, the County encourages unconventional methods and innovative ideas for meeting future recreational needs. Such non-traditional forms of parkland include landscaped medians for jogging and walking, and athletic fields that double as seasonal flood management areas. Similarly, creating pocket parks and rooftop gardens, integrating open space into redevelopment projects, and planning for more biking, hiking, and equestrian trails throughout the County will incrementally increase accessibility to public recreation areas.

Trail Systems

Trails in Los Angeles County provide multiple uses, such as recreation, education, and emergency vehicle access. Trails are designed to provide one or more functions, depending on the trail location and the desired public use. There are

hundreds of miles of dedicated equestrian, hiking, biking, and pedestrian trails in the unincorporated areas of the County, as shown in **Figure 6.2**.

Future development of trails will be easier to complete in areas with ample open space and parkland, such as the Santa Monica Mountains, Puente Hills, Simi Hills, and portions of the Antelope Valley and Santa Clarita Valley. Urban landscapes in the southern part of the County offer different opportunities for enhancing the network of trails. Development of Watershed Management Plans and the ongoing implementation of River Master Plans, such as the Los Angeles River Master Plan and the San Gabriel River Master Plan, will lead to the development of bike trails and walking paths along the rivers and tributaries from the mountains to the ocean.

Santa Monica Mountains National Recreation Area

The Santa Monica Mountains National Recreation Area is a part of the National Park System, which encompasses the mountain range from the Oxnard Plain in Ventura County, past Topanga Park to Franklin Canyon and the Hollywood Bowl in the City of Los Angeles. The Recreation Area preserves natural habitats, historical and cultural sites, offers recreational opportunities, and acts to improve the air quality for the Los Angeles basin. Covered by chaparral, oak woodlands, and coastal sage scrub, it is home to many species listed as rare, threatened, or endangered. The Recreation Area is different from the Angeles National



Santa Monica Mountains

Forest in that it is not solely owned or managed by one federal agency. Many agencies and individuals own parcels within the 150,000-acre Recreation Area. There are state and federally owned parks, privately owned land, residential neighborhoods, and commercial developments.

Land use regulations and jurisdictional authority in the Santa Monica Mountains is complex and involves many public and private entities. By establishing the Recreation Area, the National Park Service created a variety of recreational opportunities and helped protect the mountain's scenic resources and wildlife habitats by linking public parkland into a unified management system administered by the Service. The remaining areas within the Santa Monica Mountains are a checkerboard-like pattern of private and public land ownership. Most of the coastline lies within the City of Malibu, whereas much of the remaining Santa Monica Mountains is located within the unincorporated County, divided into two planning areas: the Santa Monica Mountains Coastal Zone and the Santa Monica Mountains North Area. Due to the overlapping jurisdictional boundaries, a cooperative effort by the National and State Park Services, the California Coastal Commission, private landowners, and city and County governments resulted in the formation of two conservation-minded county planning documents. They are:



Emerging Needs in Parks Use Must be Addressed



Saddle Peak, Santa Monica Mountains

Santa Monica Mountains Coastal Zone Plan

Required by state law, this Plan serves to implement the provisions and policies of the California Coastal Act at the local level. Created by the Coastal Act, the coastal zone in the Santa Monica Mountains extends inland approximately five miles from the coast. The Coastal Zone Plan's primary role is to provide more focused policy for the regulation of development within the Santa Monica Mountains Coastal Zone, an area of nearly 80 square miles between the Pacific Ocean and the Santa Monica Mountains North Area. (This plan has not yet been certified by the California Coastal Commission: the 1986 Malibu Land Use Plan is the current planning document for the Santa Monica Mountains coastal zone.); and,

Santa Monica Mountains North Area Plan

An outgrowth of a unique cooperative planning effort between local cities, the National Park Service, and area water and school districts, the Santa Monica Mountains North Area Plan was adopted by the Board of Supervisors in 2000. The Plan provides focused policies for the regulation of development within the unincorporated area of the Santa Monica Mountains west of the City of Los Angeles and north of the Coastal Zone boundary. The North Area Plan refines the policies of the county-wide General Plan, tailoring them to issues affecting that area.

The goals and policies which apply to open space, and parks and recreation are:

Goals, Policies and Implementation Actions

Goal C/OS-1

A wide range of County open space areas.

- **Policy C/OS 1.1:** Promote the preservation of open space areas throughout the County.
- **Policy C/OS 1.2:** Support the acquisition of new open space areas throughout the County.
- **Policy C/OS 1.3:** Create an established network of open space areas that provide regional connectivity, such as areas between the southwestern extent of the Tehachapi Mountains to the Santa Monica Mountains, and from the southwestern extent of the Mojave Desert to the Puente-Chino Hills.

Implementation Action C/OS 1.1

Coordinate with Local, State, and Federal park agencies and conservancies to acquire open space for recreation and biotic preservation throughout the County.

Goal C/OS-2

A balanced and interconnected network of passive and active local parks, community parks, regional recreation areas, beaches, and harbors.

- **Policy C/OS 2.1:** Develop and expand regional and local parkland in the County.
- **Policy C/OS 2.2:** Require new development to dedicate and improve parkland, as allowed by the Quimby Act. School grounds cannot be calculated as new park acreage.
- **Policy C/OS 2.3:** Direct resources to communities that are underserved by local parks.
- **Policy C/OS 2.4:** Improve current parks with needed amenities.
- **Policy C/OS 2.5:** Design parks for optimal safety, security and sustainability.
- **Policy C/OS 2.6:** Require projects to include well-designed and accessible community space.
- **Policy C/OS 2.7:** Protect marine water quality by preserving sensitive coastal resources including marine and beach habitats and sand resources, developing pollution control measures, and requiring that all permitted uses shall comply with the U.S. Fish and Wildlife, the State Department of Fish and Game, the California Coastal Commission, the California State Water Resources Board, the U.S. Army Corps of Engineers, the State Lands Commission, and CEQA regulations.

Implementation Action C/OS 2.1

Create park siting guidelines for new subdivisions to encourage parkland near schools, libraries and other public use facilities to create core community and neighborhood centers.

Goal C/OS-3

Effective inter-jurisdictional coordination and collaboration in all aspects of park and open space planning.

- **Policy C/OS 3.1:** Participate in a collaborative, inter-jurisdictional system that manages and preserves County open spaces.
- **Policy C/OS 3.2:** Promote joint-use agreements to increase and enhance park and recreation opportunities.

Implementation Action C/OS 3.1

Develop a Parks Master Plan for Los Angeles County. This plan will integrate countywide park planning goals into a single, coherent parks and recreation plan, sharing inter-jurisdictional responsibility for the provision of new parkland, continued maintenance, and joint-use agreements.

Goal C/OS-4

An interconnected network of multiuse trails designed to promote the safety of all trail user groups.

- **Policy C/OS 4.1:** Expand multi-purpose trail networks for all users.
- **Policy C/OS 4.2:** Promote strategically located staging areas and trail heads to accommodate multiuse trail users.
- **Policy C/OS 4.3:** Facilitate development and integration of feeder trails into backbone trails.
- **Policy C/OS 4.4:** Trails should be located within dedicated open space areas; where infeasible, an open space buffer should separate residential lots from the edge of the trail.
- **Policy C/OS 4.5:** Where lots are clustered to protect natural resources and public safety, large lots suitable for equestrian use should be configured adjacent to the trail corridor.

Implementation Action C/OS 4.1

Create a GIS layer of proposed federal, state, county and adjacent city trailways and trailway segments to assist staff in the project review process and aid applicants in their project design. Field verification should be conducted to determine the legitimacy of trail locations.

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Santa Catalina Island SEA

III. BIOLOGICAL RESOURCES

The Biological Resources section identifies the valuable biological resources within Los Angeles County and establishes the goals and policy direction to utilize and conserve these resources for existing and future generations. This section will address the following issues:

- Identifying the biological resources in the County;
- Significant Ecological Area (SEAs);
- Species conservation;
- Wildlife Corridors;
- Areas of Special Biological Significance;
- Wetlands and wetland protection; and,
- National Forests.

Biotic Resource Identification

The biotic resources found in Los Angeles County are some of the most diverse in the United States. They represent unusual or relatively undisturbed examples of the original plant and animal species indigenous to the County and in many cases are not found outside Southern California. Maintaining these resources is invaluable as new plant or animal species may still be found within a few miles of major urban centers, and the scientific, economic, and intrinsic values of such biotic diversity is immeasurable.

The County first began to inventory biotic resources and identify important areas of biological diversity in the mid 1970s. These biologically significant areas have historically been identified in the General Plan. Today, the primary mechanism used by the County to conserve biological diversity is a planning overlay called Significant Ecological Areas (SEAs). The SEA overlay, along with other planning tools, such as CEQA, allows the County to implement its biotic resource goals through land use regulations and biological resource assessments.

Significant Ecological Areas

SEAs are ecologically important land and water systems that are valuable as plant and/or animal communities, often integral to the preservation of threatened or endangered species and the conservation of biological diversity in the County. Ecological Transition Areas (ETAs), a subset of significant ecological areas, identifies areas where the natural ecological systems have been degraded as a result of past or on-going land use activities, but are functionally integral to the SEA by virtue of their location. Conservation of the County's biotic diversity is the main objective of the SEA designation, and connectivity between important natural habitats plays an important role in maintaining biotic communities. SEAs are not preserves, but instead, are areas where the County deems it important to facilitate a balance between new development and resource conservation. The SEA program is a resource identification tool used to conserve and manage the County's valuable biological resources.



Quail Lake, San Andreas Rift Zone SEA

Preservation efforts in the County began in 1976, when 62 areas of biological significance were identified in the Los Angeles County Significant Ecological Areas Study, commonly referred to as the England and Nelson Report, and adopted as background information in the 1976 General Plan. In 1980, 61 of these biologically significant areas were adopted as part of the Conservation/Open Space Element of the General Plan. These SEAs were islands of significant habitats within larger undeveloped areas, which were intended to provide sensitive plants and animals ample open space to ensure their continued existence. However, between 1980 and 2000, many of these areas were impacted by rapid development activity within and around the SEAs. Because the “island” habitats were isolated from each other by development within the intervening areas, the opportunity for species movement and genetic dissemination was dramatically reduced.

SEA 2000 Update Study

In 2000, the County completed the Los Angeles County SEA 2000 Update Study. Conservation planning was the fundamental goal of this update, which was designed to accomplish the following:

- Evaluate existing SEAs for changes in biotic conditions and consider additional areas for SEA status;
- Delineate SEA boundaries based upon biotic evaluation; and,
- Propose guidelines for managing and conserving biological resources within SEAs.

The SEA 2000 Update Study was based on scientifically grounded concepts regarding the size and type of linkage systems necessary to sustain the biologically diverse plant and animal species that are found within the County. The SEA Map in **Figure 6.3** depicts each area that has been designated as ecologically significant. These areas meet one or more of the following criteria, which set them apart from other biological resources in the county:

- A. The habitat of core populations of endangered or threatened species.
- B. On a regional basis, biotic communities, vegetative associations, and habitats of plant or animal species that are either unique or are restricted in distribution.
- C. Within Los Angeles County, biotic communities, vegetative associations, and habitat of plant or animal species that are unique or are restricted in distribution.
- D. Habitat that at some point in the life cycle of a species or group of species serves as concentrated breeding, feeding, resting, and/or migrating grounds, and is limited in availability either regionally or in Los Angeles County.
- E. Biotic resources that are of scientific interest because they occur at the extremes of the species' physical/geological distributions/limitations, or represent unusual variation in a population or community.

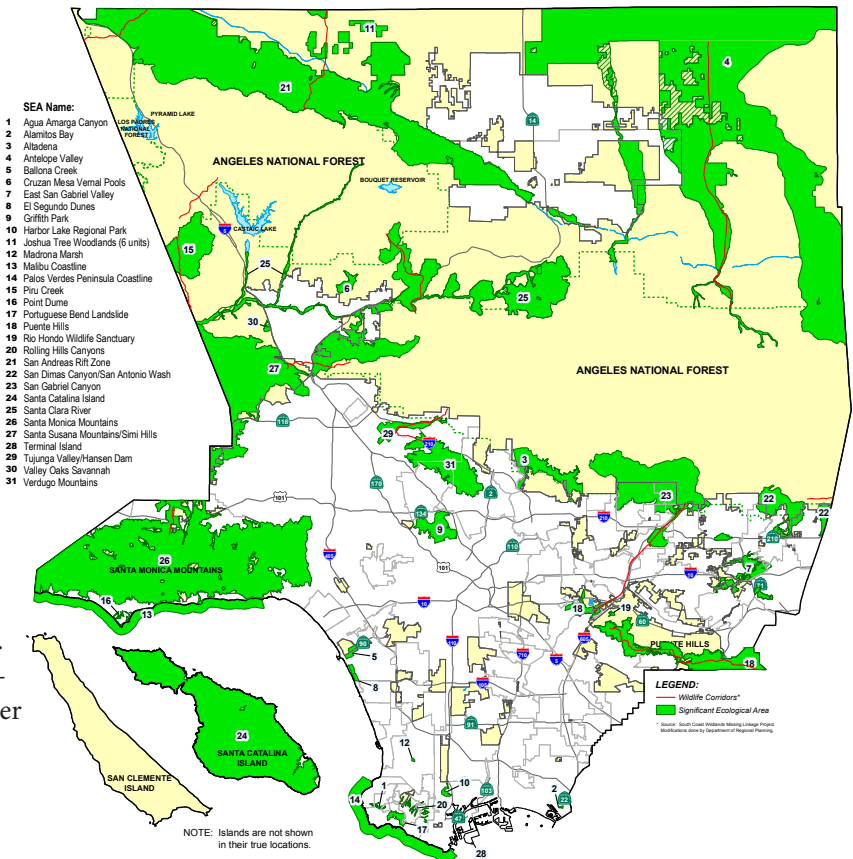


Figure 6.3: L.A. County Significant Ecological Areas (SEAs)

- F. Areas that would provide for the preservation of relatively undisturbed examples of the original biotic communities in Los Angeles County.

Further information on the procedures for development review and a description of all of the designated SEAs can be found in the Technical Appendix to the General Plan and on the County's Department of Regional Planning (DRP) website at <http://planning.lacounty.gov/>.

SEA Project Review

A balance between development and ecological resources can be achieved through the additional level of environmental and design review that many proposed development projects must undergo when located within an SEA. This review is conducted by the Significant Ecological Areas Technical Advisory Committee (SEATAC). SEATAC is a seven member advisory committee to the Regional Planning Commission (RPC) specializing in various areas of biota in Los Angeles County. Combined, they offer over 100 years of field experience. During the permitting process, SEATAC will review the proposed project and make recommendations intended to reduce or avoid impacts, particularly in the most sensitive areas on the site. The process is designed to provide careful evaluation of projects within SEAs that will promote a balance between ecological resources and new development.

Projects in an SEA, unless exempt, will be subject to the SEA regulatory review process, depending on the type of project being proposed. Not all projects within an SEA overlay will be affected. For example, when a property owner builds one single-family home, or an accessory use to an existing single-family home, the project is exempt from the SEA regulatory review process.

Design Guidelines for a Model Subdivision Project in an SEA:

1. Cluster structures and infrastructure within 25 percent or less of the parcel (including fire management requirements) and maintain the remaining portions of the site in a natural undisturbed state. Avoid development on slopes greater than 25 percent.
2. Retain a contiguous area of undisturbed open space over the most sensitive natural resources to maintain regional connectivity within the undeveloped area.
3. Do not alter, grade, fill or build within the entire extent of the 100-year flood plain of a river corridor.
4. Do not alter, grade, build upon, fill or divert water from any wetland area. Maintain a minimum 100 foot buffer around such areas.
5. Locate development away from wildlife corridors to ensure that corridors are left in an undisturbed and natural state.
6. Avoid impermeable perimeter fencing outside of development to allow wildlife to move easily through the undeveloped portion of the project.
7. Direct outdoor lighting downward, away from adjacent open space areas.
8. Landscape with materials that are locally indigenous and drought-tolerant.
9. Avoid removal of oak, walnut, sycamore, and Joshua trees, particularly if found in woodlands.
10. Locate roads and utilities serving the proposed development within the developable 25 percent area.
11. Locate utilities underground, adjacent to roadways, where possible.
12. Limit the extension of impervious infrastructure by siting development close to existing roadways.

Other projects in an SEA, particularly land divisions, will require an additional level of environmental review to help ensure that the proposal complies with the County's natural resource protection measures. Through the review process, the County will set limitations and conditions on the project to ensure consistency with General Plan policy and the recommendations of the Significant Ecological Advisory Committee.

Species Conservation

Closely related to SEAs are the goals and policies linked to protecting threatened and endangered plant and animal species throughout the County. Development is the main cause of species decline in the Southern California region. Today, approximately 20 percent of the species on the federal endangered species list are found in California, and habitats for 39 (14 percent) of these species are found in the County.

State and federal agencies only protect individual species, not biotic communities as a whole system. For example, the U.S. Fish and Wildlife Service under the Endangered Species Act monitors and protects federally listed species, as does the California Department of Fish and Game (CDFG) for state listed species. However, as plant or animal species are linked to a larger ecosystem for survival, the State recognizes that each local jurisdiction should bolster all species of wildlife for their intrinsic ecological values. The County uses this holistic approach in its preservation goals and policies for its biotic and ecological resources.

Wildlife Corridors

The U.S. Court of Appeals, Ninth Circuit, has defined wildlife corridors as “..avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas.” There are a number of wildlife corridors in the County that connect the Mojave Desert, San Gabriel Mountains, Santa Susana Mountains, Santa Monica Mountains, and Puente Hills with other core areas of wildlife habitat. The ability of migratory animals to reach these core open space and rural areas is critical to protect the County’s biodiverse ecology.

Identifying these wildlife corridors is the first step in preserving their function. Sixteen (16) well-documented corridors are depicted on the Significant Ecological Areas map, Figure 6.3, based on the Missing Linkages report written and compiled by the South Coast Wildlands Project.¹ The preservation of wildlife corridors, not only within the County, but the entire State will ensure the potential for animal movement and plant propagation at a regional scale.

Areas of Special Biological Significance

Areas of Special Biological Significance (ASBS) are those areas designated by the State Water Resources Control Board (SWRCB) as ocean areas requiring protection of marine species or biological communities from an undesirable alteration in natural water quality. There are 34 areas designated as ASBS by the SWRCB along the coast of California. Of those, six (6) are located within the jurisdiction of Los Angeles County, five (5) of which are off the coasts of the Channel Islands (one along the coastline of

the San Clemente Island and four (4) along the coastlines of Santa Catalina Island). The sixth ASBS (designated as “ASBS-24”) is located along the coasts of Ventura and Los Angeles Counties, extending from Mugu Lagoon to Latigo Point. About two-thirds of ASBS-24 lies along the coastline of the Los Angeles County.

National and State policies prohibit the discharge of pollutants into areas identified as Areas of Special Biological Significance. Specifically, the provision in the California Ocean Plan requires that “waste shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.” The County owns and maintains dozens of storm drains that discharge into ASBS-24. The County is working with other stakeholders (including other communities, regulatory agencies, environmental groups, and research institutions) to come up with appropriate policy and impact mitigation measures for stormwater related discharges in areas of ASBS.

Wetland Resources

Wetlands and habitat associated with water bodies are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Examples of wetlands include swamps, marshes, bogs, vernal pools, and playa lake areas.



Wetlands Area

¹ Penrod, K., R. Hunter, and M. Merrifield. 2001. Missing Linkages: Restoring Connectivity to the California Landscape, Conference Proceedings. Co-sponsored by California Wilderness Coalition, The Nature Conservancy, U.S. Geological Survey, Center for Reproduction of Endangered Species, and California State Parks.

However, wetlands can also remain dry for long periods of time, making their identification and management potentially difficult.

Wetlands contribute to water quality and the overall health of watersheds in several ways. They slow water flow, decrease erosion, filter water runoff, and provide habitat for many endangered plant and animal species. California has lost over 90 percent of its original wetland areas, and the County has lost 95 percent. The County continues to support the wetland reclamation and conservation efforts of numerous non-profit organizations working to preserve the County's remaining wetlands.

The preservation of wetlands is a national concern, as demonstrated by the adoption of the Federal Emergency Wetlands Resources Act in 1986. The Act established a national wetlands conservation program requiring states to include wetlands in their Comprehensive Outdoor Recreation Plans for management and preservation. The County is concerned with preserving its remaining wetlands, and any application for development in a wetland within the County's jurisdiction is forwarded to applicable state and federal agencies for further review and permitting requirements.



Lake Elizabeth, Angeles National Forest In-Holdings

Development Guidelines for Private In-Holding Projects in the National Forest

1. The maximum residential density shall be limited to one dwelling unit per five acres (1 du/5 ac).
2. Commercial recreation uses, such as ski facilities and campgrounds, may be permitted if consistent with the U.S. Forest Service Land and Resource Management Plan.
3. Commercial uses that support user groups in the National Forest may be permitted if consistent with the U.S. Forest Service Land and Resource Management Plan.
4. All private and public proposals for development within the National Forests will be reviewed concurrently by the Regional Planning Commission and the U.S. Forestry Service for compliance with the U.S. Forest Service Land and Resource Management Plan and the General Plan.

National Forests

The County's National Forests contain extensive biological resources. The Angeles National Forest and a small portion of the Los Padres National Forest encompass nearly 650,000 acres of land within the County. Established by an Executive Order from President Benjamin Harrison in 1892, the Angeles National Forest became one of eighteen national forests in California, and is now a State Historical Landmark. The forest stretches across the County in two vast sections, encompassing the San Gabriel Mountain Range. The forest is 1,018 square miles, which equates to 25 percent of the entire land area in the County. The surface topography is rugged; two-thirds of the forest has slopes steeper than 60 percent with elevations ranging from 1,200 to 10,000 feet above sea level.

Forest and Biotic Resources

Forest resources include a variety of vegetative communities ranging from semi-desert to dense woodlands supporting thousands of species of plants and animals. There are 240 miles of perennial rivers and streams as well as 19 lakes and reservoirs in the forest. A vast number of wildlife species depend on these habitats for protection, foraging and breeding, making the preservation of these areas a major concern for forestry and wildlife management.

The forest not only supports biotic communities, but it also plays a major role in the health of the major watersheds in Los Angeles County. The vast forest floor allows rainfall and snowmelt to replenish groundwater basins, providing the County with approximately 13 percent of its annual water supply. Surface water runoff fills streams and rivers,

supporting riparian habitats. Activities that occur in the forest have a potential impact not only on biotic resources, but also on the quality of local water supplies. To protect these forest functions, the U.S. Forest Service has identified two-thirds of the forest as sensitive watershed areas.

Forest Conservation

The U.S. Forest Service prepares and periodically updates a *Land and Resources Management Plan* as a policy guide to the use of lands under their jurisdiction. Within the boundaries of the National Forests, nearly 40,000 acres are privately owned. For these parcels, commonly referred to as “in-holdings”, the County retains responsibility for land use regulation. Many privately-owned lands within the National Forests are remote in location, subject to a high degree of natural hazards, and lack adequate access to paved roads and water supply. It is the intent of the General Plan that these privately-owned parcels should be regulated in a manner consistent with the overall mission of the National Forests, as established by Congress.

Most of these properties are within the jurisdiction of the County’s land use regulations, which are consistent with forest management efforts. County land use policy does not encourage development within the forests because it requires the removal of forest vegetation around structures for fire protection, erosion from hillside development may occur, and mountainous terrain subjects structures to potential landslides due to seismic activity and to severe fire hazards. The general conditions and standards for land use decisions relative to private in-holdings within the National Forests are contained in the Conservation and Open Space Element in the Technical Appendix to the General Plan.

County Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance (Part 16 of Chapter 22.56) is intended to preserve and maintain healthy oak trees in the County during and throughout the development process. Oak trees provide shade, enhance an area’s aesthetic character, reduce air pollution, prevent soil erosion, and hold an intrinsic value for residents of Southern California. The ordinance not only recognizes

oak trees as significant historical, aesthetic, and ecological resources, but places restrictions on development for their preservation. All oak trees whose trunk measures 25 inches or more in circumference (8 inches in diameter) are legally protected from being damaged or removed during the course of a development project. This ordinance applies to all trees of the oak genus, including the Valley Oak and Coast Live Oak.

Urban-Wildland Interface

The area where the edge of the forest and other open space meets development is called the urban-wildland interface. In light of future population projections, an increase in the number of housing units in the urban-wildland interface is expected. To reduce the impact of this development on the forest, hillside development is discouraged, especially along forest boundaries. The extension of SEAs in the interface helps to protect forest resources by requiring an additional layer of review for development of private in-holdings. This approach to development in the urban-wildland interface is consistent with the Angeles National Forest *Land and Resources Management Plan*. The goals and policies within this element address issues and concerns in the Angeles National Forest and are intended to help protect the forest’s biotic, watershed, and recreational resources.

“Despite nature’s many earlier warnings, the pollution and destruction of the natural environment has gone on, intensively and extensively, for the last three hundred years, without awakening a serious reaction; and while industrialization and urbanization have transformed the human habitat, it is only during the last half of the century that any systematic effort has been made to determine what constitutes a balanced and self-renewing environment; containing all the ingredients necessary for man’s biological prosperity, social cooperation and spiritual stimulation.”

-Lewis Mumford
noted historian and author of *The City in History*

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The goals and policies which apply to biological resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-5

Significant ecological systems, biotic communities, and imperiled species preserved in perpetuity.

- **Policy C/OS 5.1:** Require applicants to consult with County staff early in the development process for assistance in project designs that maximize natural features and preserve biological resources.
- **Policy C/OS 5.2:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.
- **Policy C/OS 5.3:** Maximize the ecological function of the County's diverse natural habitats, such as Coastal sage scrub, Valley needlegrass and other perennial grasslands, Joshua trees, California walnut, Western Sycamore, and native Oak woodlands.
- **Policy C/OS 5.4:** Support the restoration and preservation of degraded streams, rivers, wetlands and other areas with significant biological resources.
- **Policy C/OS 5.5:** Maintain and monitor the Significant Ecological Areas (SEAs) and other programs to conserve special-status species, their associated habitat and wildlife movement corridors.
- **Policy C/OS 5.6:** Require that development within an SEA be designed to meet the Significant Ecological Area Technical Advisory Committee recommendations, to the greatest extent possible, and to:
 - Preserve sensitive ecological resources;
 - Maintain sufficient natural vegetative cover and open spaces to buffer sensitive resource areas;
 - Maintain water bodies and watercourses in a natural state;
 - Preserve wildlife movement corridors;
 - Site roads and utilities to avoid sensitive habitat areas or migratory paths;
 - Control light pollution;
 - Reduce erosion;

- Limit noise producing uses; and,
- Provide open or permeable fencing.

- **Policy C/OS 5.7:** Require that development mitigate 'in-kind' for unavoidable impacts on biologically sensitive areas and permanently preserve mitigation sites.

- **Policy C/OS 5.8:** Maintain watercourses and wetlands in a natural state, unaltered by grading, fill, or diversion activities.

Implementation Action C/OS 5.1

Initiate a County tree planting program with a goal of planting one tree for every resident in the unincorporated areas of Los Angeles County. Drought resistant and native trees should be strategically planted in designated locations as part of neighborhood beautification programs, along commercial corridors, and in school yards.

Implementation Action C/OS 5.2

Create a formal Mitigation Land Banking Program with appropriate criteria for a project's eligibility that will allow the purchase of land within Significant Ecological Areas (SEA) as a mitigation measure for development in areas outside of SEAs. These purchases should be strategically targeted in SEAs that are threatened by development activity along the urban fringe and within existing urban areas. Optimal mitigation would be "in-kind" with regard to species or habitat. The optimal realization radius for "in-kind" mitigation is two (2) miles, when feasible.

Implementation Action C/OS 5.3

Consider adding a new section to the Initial Study Checklist to create a review procedure for open space connectivity. Connectivity reviews shall consider the physical linkages on the project site and how it will maintain regional connectivity, particularly with regard to wildlife movement corridors.

Implementation Action C/OS 4.4

Create design guidelines for wetlands, rivers, streams, and creeks to maintain natural features, protect stream habitat, and prevent flooding and accelerated erosion.

Implementation Action C/OS 4.5

Amend the Oak Tree Ordinance to protect a ten (10) foot radius from the drip line of an oak tree from grading. Evaluate the need to modify the standards for oak tree permits in small single family lots in urban areas, as opposed to rural or common spaces.

IV. AGRICULTURAL RESOURCES

Agriculture plays an important role in the economy of the State of California. Los Angeles County is highly urbanized and much of the usable agrarian land has been developed. As such, agricultural lands are viewed as valuable non-renewable resources, and the County recognizes the need to protect agricultural lands from continued development and non-agricultural uses. This section:

- Describes the process for identifying valuable agricultural land;
- Identifies the agricultural land throughout the County; and
- Provides policy direction for the management and protection of the County's remaining agricultural resources.

Agricultural Resources in Los Angeles County

Agriculture is a major component of the local and state economy. Although highly urbanized, Los Angeles County produced over \$270 million dollars in agriculture products in 2006. **Table 6.3** summarizes the dollar value of the crops and farm products produced in Los Angeles County. Nursery products remain the number one crop produced in Los Angeles County. Harvested acreage for vegetable crops dropped 30% from the previous year, and the County saw production losses from vegetable crops, field crops, and dairy and livestock production. Production gains were seen in fruit and nut crops and nursery products.

The emerging trend for agriculture in the County is one of less farming and of less land being used for agricultural activities. The 2002 U.S. Census of Agriculture counted a total of 1,543 farms in the County, a 7 percent decrease from the previous census in 1997. The census showed a similar decreasing trend in the total number of acres used for farming. In 2002, the total number of acres in the County used for farming was 111,458, a 17 percent decrease from the 1997 census. Finally, although the average size of Los Angeles County farms is now 72 acres, the majority of the County's farms are 50 acres or smaller.

Identifying Valuable Agricultural Lands

The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service classifies soils into eight categories based on agricultural potential. This classification depends on issues such as slope, organic matter, flooding

Table 6.3: 2006 Value of L.A. County Agricultural Crops & Commodities

Commodity	2006 Value
Nursery Products (Indoor plants, ornamental trees, etc.)	\$191,879,000
Cut Flowers and Decoratives	\$581,000
Fruits and Nuts (Strawberries, avocados, cherries, apples, etc.)	\$26,674,000
Vegetable Crops (Root vegetables, herbs, greens, etc.)	\$33,146,000
Field Crops (Alfalfa, grain hay, rangeland)	\$11,176,000
Livestock Production	\$6,228,000
Apiary (Honey, beeswax)	\$1,211,000
Forest Products (Firewood)	\$20,000
Total	\$270,915,000

Source: 2006 Los Angeles County Crop and Livestock Report

potential and erosion hazards. From this classification, prime soils (Class I and II soils) are identified for agricultural production. Based on this system, the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) identify state farmland ideally suited for agricultural use. The program does not affect local land use decisions, but is simply an identification tool that can be used for policy purposes by local governments.

Figure 6.4, Los Angeles County Agricultural Resource Areas Map, identifies important farmland and grazing lands in Los Angeles County based on FMMP data. A thorough description of each farmland category can be found in the Technical Appendix to the General Plan. The types of farmland identified in the FMMP study and in **Figure 6.4** include the following:

- Prime Farmland;
- Farmland of Statewide Importance;
- Unique Farmland;
- Farmland of Local Importance; and,
- Grazing Land.

Agricultural Opportunity Areas

Agricultural Opportunity Areas (AOAs) are a County identification tool that indicates land where commercial agriculture is taking place and/or is believed to have a future potential based on the presence of prime agricultural soils, compatible adjacent land uses, and existing County land use policy. Local planning efforts can identify AOA's in

their community based plans, and the County supports communities in establishing more detailed land use policy related to agricultural levels at the community level.

The intent of General Plan policy is to protect the County's agricultural resources from the intrusion of incompatible uses that conflict with or preclude viable agricultural activity. Agricultural uses are encouraged in appropriate areas throughout the County and are not limited by the mapped boundaries of designated AOAs. Applications for non-agricultural uses in these areas are evaluated for their impact upon adjacent agricultural operations.

Williamson Act

Commonly referred to as the Williamson Act, the California Land Conservation Act of 1965 enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. To compensate for this loss in tax revenue, local governments receive an annual subvention from the state via the Open Space Subvention Act of 1971. The only Williamson Act contract in the County is for the preservation of open space on Santa Catalina Island. For more information on the Williamson Act, visit the State of California Department of Conservation at www.conservation.ca.gov.

Urban-Agricultural Interface

Retaining valuable farmland in the County will be difficult as projected growth in the County over the next 20 years is likely to continue. Increased population growth and accompanying development may result in the conversion of farms and land with prime soil to non-agricultural uses. This scenario is especially troublesome for the North County area, which contains most of the prime farmland in the County, and is also experiencing the most rapid population growth.

As development in the County expands from urban centers into agricultural areas, clashes between land uses may occur.

Residents of new housing developments often voice concern over odors, dust, and pesticides from neighboring farms. In an effort to avoid such conflicts, the County designates areas surrounding agricultural lands as rural, allowing for rural development that is compatible with agricultural activities. Furthermore, the County encourages agricultural activities and agricultural development that do not affect the water quality of the County's water bodies.

One policy area that has significantly impacted agricultural activities is that of water supply. Historically, water supplies within the Antelope Valley Region have been used primarily for agriculture. However, due to population growth, water demands from residential and commercial uses have increased significantly. With drought conditions worsening the County's water supply, there are growing conflicts in northern County communities about how best to use existing water resources; for agricultural activities or for new development. The County recognizes the importance of balancing the water needs of both farmers and residents.

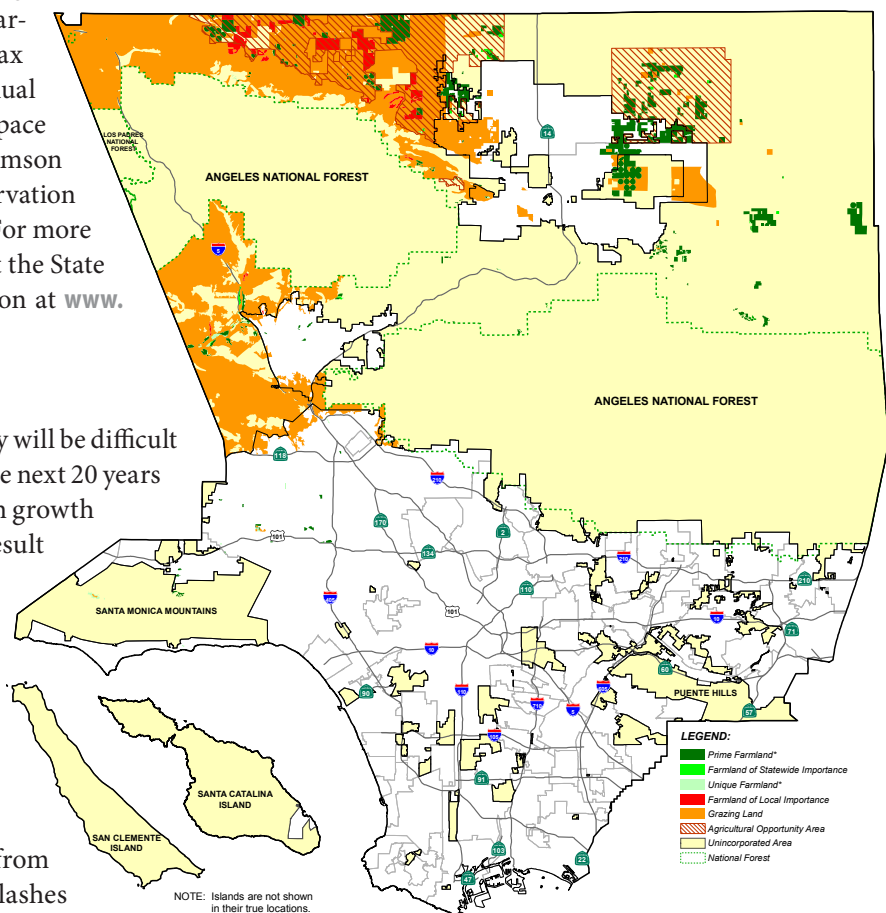


Figure 6.4: L.A. County Agricultural Resource Areas

Sustainable and Organic Farming

Organic farming is a form of agricultural production that purposefully avoids or largely excludes the use of synthetic fertilizers, pesticides, herbicides, plant growth regulators and livestock feed additives. Instead, organic farmers use crop rotation, crop residues, animal manures, other beneficial organisms and mechanical cultivation to maintain soil productivity and control pests. Organic farming is considered environmentally responsible in that the exclusion of chemicals prevents the spread of these toxins into the air, water, soil and food stuffs.

There are an estimated 75 million acres of organic farmland in the world. In the United States, “organic” foods must be certified by the United States Department of Agriculture (USDA). Any food that claims it is organic or organically produced must attain this certification. In Los Angeles County, there is a limited amount of organic farming, reaching only 111 acres in 2006. Most farming occurring in the Antelope Valley is large agribusinesses, which have historically avoided organic farming in order to maximize yield.

The concepts of organic farming are part of what is known as sustainable agriculture. Embodied in the principles of sustainability, sustainable agriculture refers to the production of food without the depletion of the earth’s resources or polluting of the environment. More than organic farming, sustainable agriculture addresses the social, economical, and environmental effects of farming.

For more information on organic farming practices, visit the National Sustainable Agriculture Information Service website at www.attra.org.

The goals and policies which apply to agricultural resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-6

Productive farmland that is protected for local food production, open space, public health, and the local economy.

- **Policy C/OS 6.1:** Utilize State and local data to identify prime agricultural land.
- **Policy C/OS 6.2:** Protect agricultural uses from encroaching urban and suburban development.
- **Policy C/OS 6.3:** Limit development on prime agricultural land.
- **Policy C/OS 6.4:** Support agricultural practices that minimize and reduce soil loss and prevent water runoff from affecting water quality.
- **Policy C/OS 6.5:** Support innovative agricultural practices that conserve resources and promote sustainability, such as drip irrigation, hydroponics and organic farming.
- **Policy C/OS 6.6:** Encourage agricultural activity in Agricultural Opportunity Areas and under electricity transmission line easements.
- **Policy C/OS 6.7:** Cultivate and expand farmer’s markets throughout the County.
- **Policy C/OS 6.8:** Encourage a countywide community garden and urban farming program.

Implementation Action C/OS 6.1

Work with the Community Development Commission to expand the County’s community garden program and to identify County-owned parcels and other potential sites for community gardens.

Implementation Action C/OS 6.2

Develop an organic farming/hydroponics incentive program.

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V. MINERAL AND ENERGY RESOURCES

The Mineral and Energy Resources section addresses the use and management of valuable energy and mineral resources in Los Angeles County, and the increasing importance of conservation of these resources for future users. The demand for energy resources in Los Angeles County is high, and projected growth in the region will continue to strain our energy and mineral supply. The purpose of this section is to set forth goals and policy direction that is responsive to the community's need for energy and mineral resources, while simultaneously promoting their efficient and sustainable use. This section will address:

- Mineral resources in the County;
- Mineral Resource Zone identification;
- Mineral Resource Zone regulation and conservation;
- Oil and natural gas resources;
- Alternative energy resources; and,
- Energy conservation.



Oil Derricks, Baldwin Hills

Table 6.4: Geologic Inventory of Mineral Resources in Los Angeles County

Production Region	Aggregate Reserves as of 1999	Per-capita Consumption Rates:14	Estimated Depletion Year:
Little Rock Creek Fan	250 Million Tons	12.7 Tons	2046
Soledad Production Area	160 Million Tons	9.9 Tons	2046
Sun Valley Production Area	20 Million Tons	2.4 Tons	2008
Irwindale Production Area	250 Million Tons	4.0 Tons	2017

Source: California State Mining & Geology Board, Aggregate Resources in the Los Angeles Metropolitan Area 1999

Mineral Resources in Los Angeles County

Mineral resources are commercially viable aggregate or mineral deposits, such as sand, gravel, and other construction aggregate, oil, and natural gas. California is the largest consumer of sand and gravel in the nation, but is also a major producer, generating approximately one billion dollars worth of mineral resources annually. The Los Angeles metropolitan area produces and consumes more construction aggregate than any other metropolitan area in the United States. In light of projected growth, a continuous supply of minerals for urban infrastructure is essential to the Southern California economy.

Mineral Resource Zone Identification

The County depends on the State of California's Geological Survey to identify deposits of regionally significant aggregate resources. These clusters or belts of mineral deposits are designated as Mineral Resources Zones (MRZ-2s). Four major MRZ-2s are designated in the County and are shown in **Table 6.4**: the Little Rock Creek Fan, Soledad Production Area, Sun Valley Production Area, and Irwindale Production Area. The Soledad and Little Rock Creek MRZ-2s contain significant deposits that can provide for future needs through the year 2046. However, the Sun Valley MRZ-2 is near depletion, and the Irwindale MRZ-2 is expected to approach depletion in 2017. The County's MRZ-2s are shown in **Figure 6.5**, the Los Angeles County Natural Resource Areas Map, which are areas that require special management due to the presence of natural resources important to the County.

Mineral Resource Zone Regulation and Conservation

The California Department of Conservation protects mineral resources to ensure adequate supplies for future production. The California Surface Mining and Reclamation Act of

1975 (SMARA) was adopted to encourage production and conservation of mineral resources, prevent or minimize adverse effects to the environment, and protect public health and safety. An important component of SMARA requires that all surface mine sites be reclaimed to a productive second use upon the completion of mining (Public Resources Code, sub sections 2712 (a),(b), and (c)).

In a joint regulatory effort, SMARA authorizes local governments to assist the state in issuing mining permits and monitoring site reclamation efforts. To manage mining resources, the County has incorporated mineral resource policies into the Open Space and Conservation Element. In addition to these policies, Title 22 of the Los Angeles County Code (Part 9 of Chapter 22.56) requires that applicants of surface mining projects submit a Reclamation Plan prior to receiving a permit to mine, describing how the excavated site will ultimately be remediated and transformed into another use.

Oil and Natural Gas Resources

In the 1920's, Los Angeles County was the world's fifth largest oil producer. Today, oil production is not nearly as prevalent as it was almost a century ago. Small scale oil production still occurs in many parts of the County, such as in the Baldwin Hills and the Santa Clarita Valley. The California Division of Oil, Gas, and Geothermal Resources permits and tracks each operating production well and natural gas storage well and ultimately monitors the decommissioning process. The County's involvement is limited to regulating the zoning and land use standards to protect surrounding communities from oil production impacts. Strict standards for the installation, operation, and decommissioning of oil derricks are necessary to protect natural resources and prevent excessive grading in hillside areas. Further information on the County codes related to oil resources can be found in the County's zoning codes at the Department of Regional Planning's website at <http://planning.lacounty.gov/>.

Development in Mineral Resource Areas

Mineral resource areas include existing surface mining activities, areas identified or to be identified as containing significant mineral resources by the State Mining and Geology Board, and areas suitable for the production of energy resources, including crude oil and natural gas. The General Plan encourages the protection of County mineral resource areas, as well as the compatible land use of areas surrounding and adjacent to these areas. The general conditions and standards to guide land use decisions in or near mineral resource areas are provided in the Conservation and Open Space Element in the Technical Appendix to the General Plan.

Energy Resources

Energy in California is produced from a variety of natural resources, including non-renewable oil and natural gas, and renewable hydrologic, wind, and solar power. Although nonrenewable energy resources (oil and natural gas) generate a majority of the state's energy, California has one of the most diverse portfolios of renewable energy resources in the nation. Aside from existing

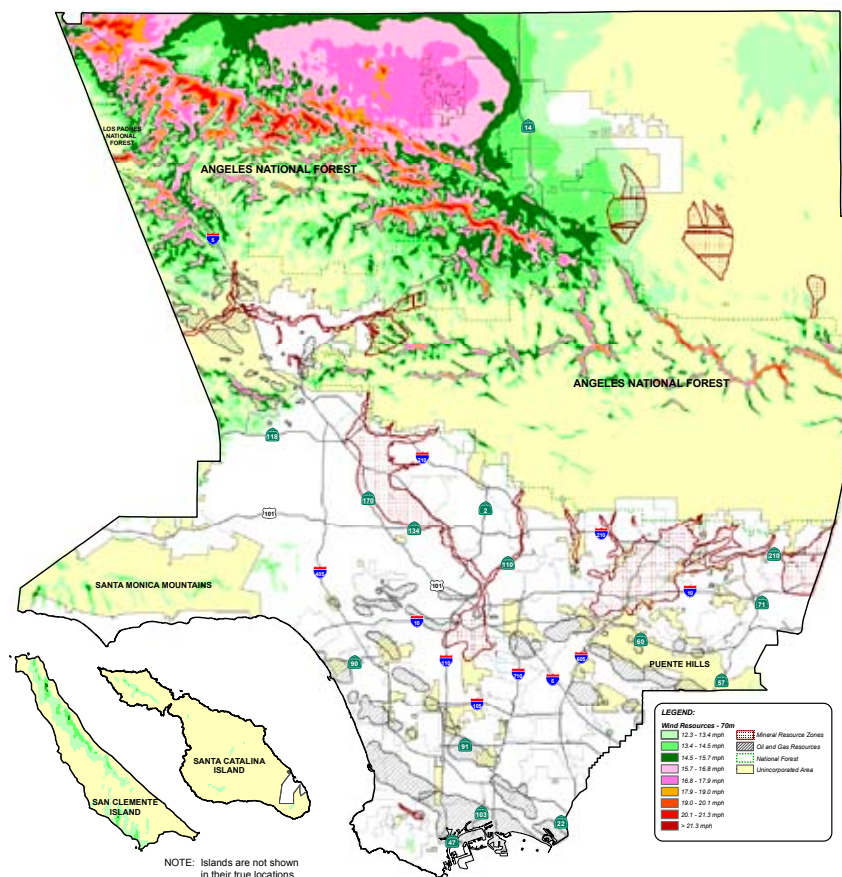


Figure 6.5: L.A. County Natural Resource Areas



Wind Turbine, Antelope Valley

oil and natural gas deposits, the state's topography and climate easily lend themselves to the production of energy from hydrologic, wind, solar rays, and tidal power. There are significant opportunities for the County to produce alternative renewable energy from renewable sources, and many of the General Plan's policies promote this course of action.

Areas suitable for renewable energy generation can be found in **Figure 6.5**, the Los Angeles County Natural Resource Areas Map. This map identifies both wind and solar power as the primary renewable energy sources available in the County. Wind power levels for all elevations can be found in the Conservation and Open Space section of the Technical Appendix.

Renewable Energy

Renewable energy is derived from resources that are regenerative and cannot be depleted, such as wind and solar power. For this reason, renewable energy sources are fundamentally different from fossil fuels such as coal, oil, and natural gas, which are finite and also produce harmful greenhouse gases and other pollutants.

In 2005, 73-90% of utility generated electricity output was natural gas fired while renewable energy sources provided more than 10% of all electricity in California. When large hydroelectric facilities are included, that share jumps to more than 27%. The California Renewable Portfolio Standard

Program, an initiative of the California Energy Commission, calls for this share to increase to 33 percent (not counting large hydroelectric facilities) by 2020. Potential renewable energy generators in the State include solar, wind, tidal, small-scale hydroelectric, geothermal, fuel cells, biomass, and landfill gas reclamation.

An important trend of renewable energy production focuses on the development of on-site energy generation. On-site energy generation utilizes renewable energy technologies for on-site energy production. On-site energy generation promotes investment in renewable energy usage, creates an income generating use where utility companies buy back excess

power, and relieves stress and dependence on the existing electrical grid's infrastructure.

The California Energy Commission is charged with the increased development of the renewable energy sector in California. There are several programs in the State that facilitate the development of renewable energy production, as well as energy conservation, including rebates for solar, wind, and fuel cell technologies, public education, and funding research and development of emerging renewable energy technologies. For more information on the California Energy Commissions Renewable Energy Programs, go to www.energy.ca.gov/renewables.

Focus Fusion

An exciting new source of renewable energy that is currently being developed for practical application is a type of nuclear fusion that utilizes hydrogen-boron fuel, an abundant natural resource, and the plasma focus device. Unlike nuclear fusion, cold fusion, and fission, focus fusion does not have any toxic waste associated with the production of energy. For more information about this safe, clean, cheap, and unlimited energy source, visit www.focusfusion.org.

Energy Conservation

Energy demand for transportation and non-transportation uses, including gasoline, electricity, heating, and cooling will continue to increase as the County's population grows. Energy consumption patterns demonstrate that County residents consume proportionally more energy for transportation than the rest of the State. This is due, in part, to the congested freeways in the County and the long commuting distances of the region's workforce. Low-density, automobile-dependent communities place high demands on our declining energy resources. As a result, the County General Plan policies promote rail, bus, carpool, bicycle, and pedestrian modes of transportation as alternatives to the single passenger automobile, and the Land Use element focuses on providing policies that promote the efficient development and use of land to reduce consumptive land use patterns.

State and County building codes determine the level of energy efficiency to be met in building construction. Changes to building codes over the years have resulted in substantial improvements in energy efficiency, thus requiring less power for lighting, cooling, and heating functions. In 1996, the County's Building and Safety Division of the Department of Public Works (DPW) received the California Energy Commission ACES award, Assuring Compliance with the Energy Standards, for creatively encouraging the efficient use of energy. More recently, "green building" techniques such as the use of passive solar orientation, recycled building materials, improved insulation, energy star appliances, and on-site, small-scale renewable energy generation have all proven to be a prudent means of energy conservation.

The Department of Regional Planning promotes land use planning that features innovative conservation programs that encourage renewable energy production, conservation measures, and green building practices such as passive solar site design, shade tree programs, green building practices, green roofs, and on-site wind and solar energy production. The County aims to be a leader in creating energy efficient communities through progressive and efficient land development guidelines and green techniques. Land use planning featuring innovative conservation programs that encourage renewable energy, conservation measures, and green building practices will help to reduce overall energy consumption and improve air quality in the County.

The goals and policies which apply to mineral and energy resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-7

Locally available mineral resources to meet the needs of construction, transportation and industrial production.

- **Policy C/OS 7.1:** Protect Mineral Resource Zones (MRZs) from urban development and discourage incompatible adjacent land uses.

Implementation Action C/OS 7.1

Through the community-level planning process, designate Open Space-Mineral Resources areas.

Goal C/OS-8

Mineral extraction activities that are conducted in a manner that protects the environment.

- **Policy C/OS 8.1:** Require mineral resource extraction activities to comply with the regulations of the County Zoning Ordinance, and State laws and guidelines in accordance with provisions set forth by the Surface Mining and Reclamation Act (SMARA) and the California Division of Oil, Gas and Geothermal Resources.
- **Policy C/OS 8.2:** Encourage the recycling of abandoned mineral extraction sites to productive second uses.
- **Policy C/OS 8.3:** Require appropriate levels of remediation for all oil and natural gas production sites based on perceived future use

Implementation Action C/OS 8.1

Through the local-level planning process, create standards for buffering around mineral resource sites.

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Goal C/OS-9

An optimal mix of renewable and non-renewable energy sources.

- **Policy C/OS 9.1:** Expand the production and use of alternative energy resources.
- **Policy C/OS 9.2:** Encourage the effective management of non-renewable resources, including storage facilities to meet peak demands.
- **Policy C/OS 9.3:** Require all new development to employ passive solar techniques and active solar technologies.

Implementation Action C/OS 9.1

Develop a corporate sponsorship program to increase public awareness and consumer education for development related issues such as on-site alternative energy generation, water and energy conservation measures, xeriscaping, tree planting and public health.

Implementation Action C/OS 9.2

Streamline permitting process to accommodate renewable energy source usage for on-site and commercial production.

Goal C/OS-10

A County that maximizes energy conservation.

- **Policy C/OS 10.1:** Development should be designed to provide substantial tree canopy cover, utilize light-colored paving materials and reflective roofing to reduce the 'urban heat island' effect.

Implementation Action C/OS 10.1

Amend the County Code, as applicable, to require 30% tree canopy coverage, at maturity, on new development.

Implementation Action C/OS 10.2

Purchase CITYGreen ArcGIS to allow planners to evaluate landscape plans and proposed development for summer energy conservation, native tree preservation and impacts to air quality.

Implementation Action C/OS 10.3

Update and adopt the draft Solar Energy Subdivision Design Manual, which depicts passive and active solar energy design guidelines.

VI. SCENIC RESOURCES

Los Angeles County is home to some of the most iconic and beautiful vistas in the world. The County recognizes that the coastline, mountain vistas, and other scenic features of the region are a significant resource for County residents and businesses. This section of the Open Space and Conservation Element addresses the desire of the County to preserve its valuable designated scenic areas, vistas, and roadways. The County's scenic resources consist of designated scenic highways and corridors (or routes), and County recognized scenic hillsides and ridgelines. This section specifically addresses:

- Official State Scenic Highways;
- County scenic corridors and routes;
- Scenic hillsides and ridgelines; and,
- Hillside development and regulation.

Official State Scenic Highways and Corridors

The Los Angeles County Scenic Highway Plan was created to conform to the State Scenic Highway Program. The State Scenic Highway Program was created in 1963 to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. According to State guidelines, a highway may be designated scenic depending upon how much of the natural



Malibu Canyon-Las Virgenes Scenic Highway

Table 6.5: County Official State Scenic Highways

Designation	Highway	Location
State Scenic Highway	Angeles Crest Highway-Route 2	From 2.7 miles north of I-210 to the San Bernardino County Line.
County Scenic Highway	Mullholland Highway (2 sections)	From State Route 1 to Kanan Dume Rd. From West of Cornell Rd. to East of Las Virgenes Rd.
County Scenic Highway	Malibu Canyon – Las Virgenes Highway	From State Route 1 to Lost Hills Rd.

Source: California Department of Transportation, 2007

landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

To be designated as an official state scenic highway, a city or county must create a Corridor Protection Program, and a governing body (i.e., the County's Board of Supervisors) must approve of the program. Each Corridor Protection Program must contain the following five elements related to preserving the nominated scenic highway:

- Regulation of land use and density of development;
- Detailed land and site planning;
- Control of outdoor advertising;
- Careful attention to and control of earthmoving and landscaping; and,
- Attention to design and appearance of structures and equipment.

Further information on the process to nominate a highway for official state scenic designation can be found at the California Department of Transportation Scenic Highway Program website at http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm.

County Official Scenic Highways

Los Angeles County contains one official state scenic highway and two official County scenic highways, as seen in Table 6.5 and Figure 6.6.

The State Scenic Highway Program currently includes eight (8) other routes that have been nominated and are eligible for official state designation. These routes can be found in Table 6.6, and can also be seen in Figure 6.6. To propose further routes for official state scenic designations in unincorporated areas of the County, please contact the Department of Regional Planning.

County Scenic Designations

In addition to official State-designated Scenic Highways, the County works to identify, protect, and enhance its scenic resources through its own countywide scenic designations. The General Plan also allows for community-based plans to further identify and designate scenic resources, corridors, or routes in their communities that differ from the official State designation. For example, the

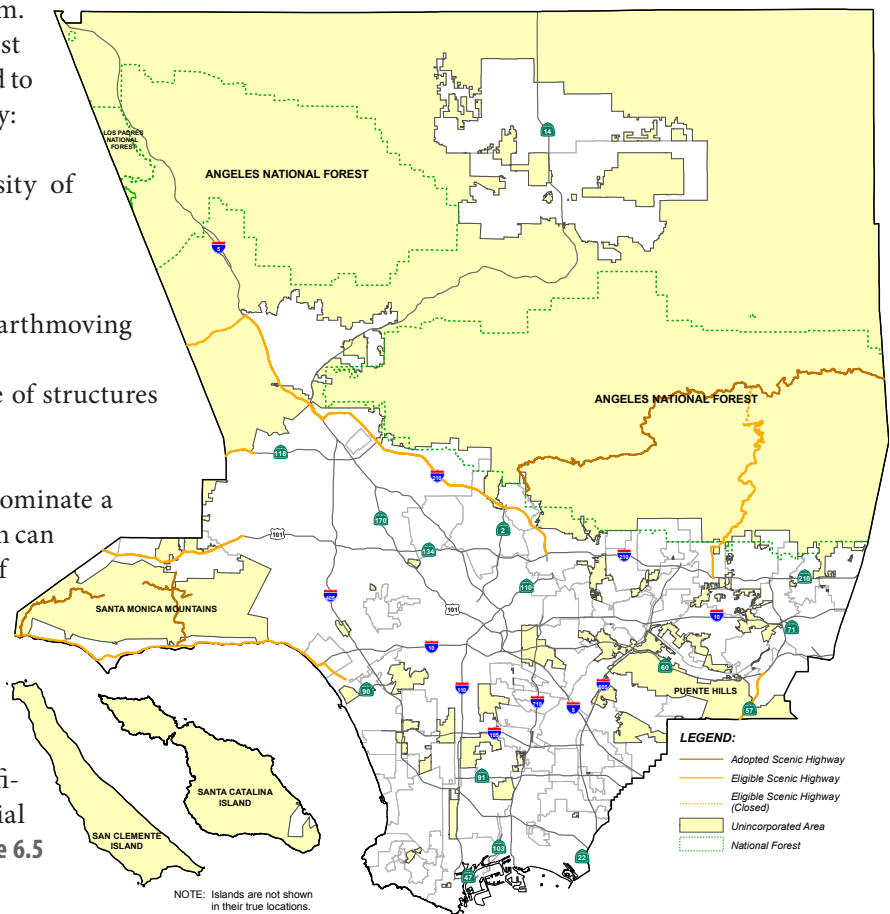


Figure 6.6: L.A. Adopted and Eligible Scenic Highways

Santa Monica Mountains North Area Plan (2000) identifies the routes and corridors of scenic importance under its jurisdiction, and applies more specific goals, policies, and implementation actions related to the preservation and protection of the area's individual scenic resources.

The Technical Appendix to the General Plan provides detailed descriptions for the selection of scenic resources, scenic corridors, and provides practices for their continued protection and preservation.

Other Scenic Resources

The scenic hills and mountains of the County play a major role in defining the County's landscape and

Table 6.6: Eligible County Official State Scenic Highways

Route Number	Eligible Route	Location
1	Pacific Coast Highway (2): From State Route 187 near Santa Monica to State Route to Ventura County Line.	Postmiles 32.2 – 21.1.
5	Golden State Freeway (I-5): From I-210 near Tunnel Station to State Route 126 near Castaic.	Postmiles R 44.0 – R 55.5
39	State Route 39: Beginning at I-210 near Asuza, to State Route 2 in the Angeles National Forest.	Postmiles 14.1 – 44.4
57	State Route 57: Beginning at State Route 90 to State Route 60 (Pomona Freeway) near the City of Industry.	Postmiles 19.9 – R 4.5
101	Ventura Freeway (101): From State Route 27 (Topanga Canyon Blvd.) to the Ventura County Line.	N/A
118	State Route 118: From State Route 23 to Desoto Ave. to near Browns Canyon.	Postmiles 17.4 – R 2.7
126	State Route 126: From the Ventura County Line to the I-5 interchange in Castaic.	Postmiles R 2.0 – R 5.8
210	Foothill Freeway (210): From I-5 near Tunnel Station to State Route 134.	Postmiles R 0.0 – R 25.0

Source: California Department of Transportation, 2007

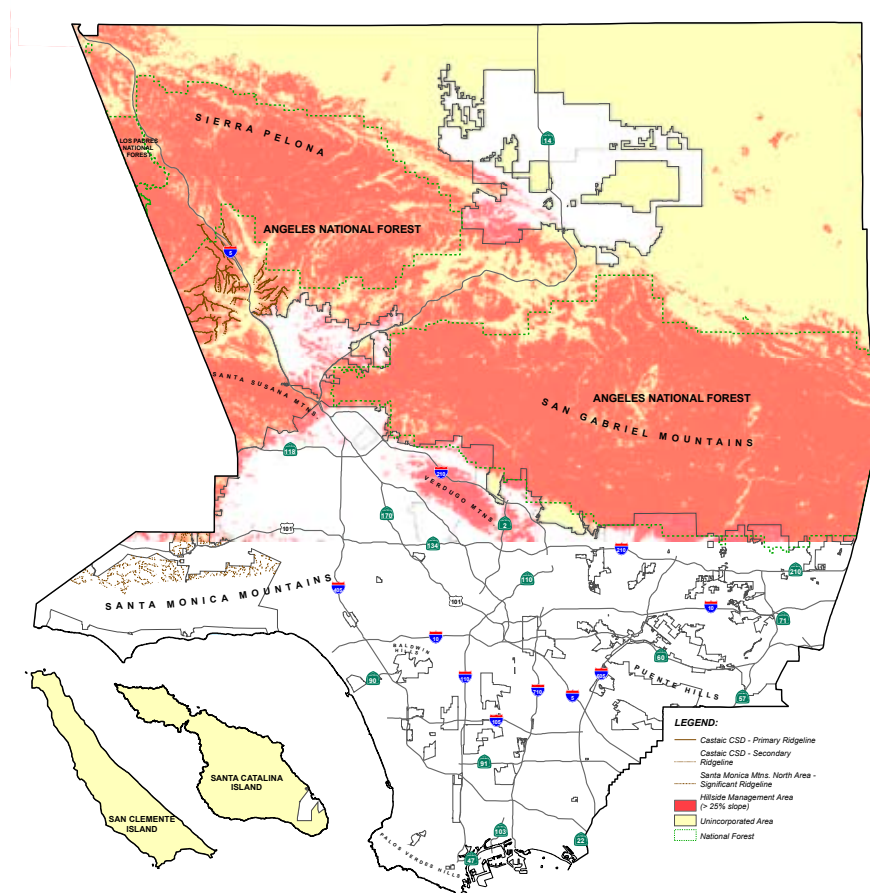


Figure 6.7: L.A. County Ridgelines and Hillside Management Areas

communities. The San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains, and Puente Hills are viewed as public resources, and the County supports the protection and preservation of these resources.

Currently, there are two designated County scenic resources: significant ridgelines and scenic hillsides.

Significant Ridgelines

There are numerous ridgelines that provide dramatic views for unincorporated County communities. The General Plan supports the protection and preservation of the County's significant ridgelines, and allows individual communities to identify and regulate their ridgeline resources. To identify significant ridgelines, the following criteria must be considered:

Development Guidelines for Projects in Scenic Resource Areas

The following guidelines apply to projects that are located within Scenic Resource Areas (Scenic Corridors, Significant Ridgelines, and adjacent to Scenic Highways):

1. Development must be designed to create a consistent visual relationship with the natural terrain and vegetation.
2. Structures and landscaping must complement and enhance scenic views, and landscaping must be drought-tolerant.
3. All grading activities must conform to the existing terrain.
4. Watercourses must be preserved in their present condition except where necessary, or be restored to their appearance and function.
5. Commercial or industrial uses shall be conducted within closed buildings, except for restaurants, recreational uses, and gasoline/service stations.
6. Outdoor advertising and billboards is prohibited within 500 ft. of the roadway in Scenic Resource Areas.
7. Roadside rests, vista points, and scenic areas with interpretive displays should be incorporated into development projects.

- Topographic complexity;
- Uniqueness of character and location;
- Presence of cultural or historical landmarks;
- Visual dominance on the skyline or viewshed, such as the height and elevation of a ridgeline; and,
- Environmental significance to natural ecosystems, parks, and trail systems.

Scenic Hillsides

To preserve the natural beauty of hillsides in the unincorporated County, land use activities that may result in environmental degradation are subject to regulations and design guidelines that limit hillside development based on slope, soil, natural drainage channels, seismic hazards, and fire hazards. By imposing these design conditions, a more sensitive development occurs in a manner that respects the natural topography and biological resources of the area. To this end, the County utilizes the Hillside Management

Ordinance as a regulatory mechanism to consider potential public safety, environmental degradation, and hillside alteration in areas where the slope is 25% or greater. **Figure 6.7** shows a map of the County's Hillside Management and designated Ridgeline Management Areas. Further information on design standards for hillside development can be found on the Department of Regional Planning's website at <http://planning.lacounty.gov/>.

Threats to Scenic Resources

Southern California has lost many of its scenic resources due to a variety of human activities. In the absence of adequate land use controls, many scenic amenities have been adversely affected by unsightly development and urban sprawl. The visual pollution associated with the proliferation of billboards, signs, utility lines, and unsightly urban uses detracts from and often obscures many of our scenic resources. Another factor that significantly affects visual quality is air pollution. Man-made sources of air pollution, particularly tailpipe emissions from cars and trucks contribute to the reduction of visibility and to the deterioration of some vegetation and wildlife.

The County recognizes the need to preserve its scenic corridors, and weighs that need against the public and private costs of regulation. Communities often have strong opinions on scenic resources as well as an interest in how land use practices can either protect or hamper scenic corridors.



Significant Ridgeline, Santa Monica Mountains

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The goals and policies which apply to scenic resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-11

Protected visual and scenic resources.

- **Policy C/OS 11.1:** Identify and protect scenic resources.
- **Policy C/OS 11.2:** Identify and protect the County's scenic highways, corridors and routes.
- **Policy C/OS 11.3:** Manage development in hillside areas (25% slope or greater) to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion and landslides.
- **Policy C/OS 11.4:** Reduce light trespass and light pollution.

Implementation Action C/OS 11.1

Create a scenic corridor and scenic viewshed program and/or ordinance to protect the County's remaining scenic resources.

Implementation Action C/OS 11.2

Develop and adopt a "Dark Skies" ordinance.

Implementation Action C/OS 11.3

Update Hillside Management CUP to separate the Hillside Management provisions from the SEA provisions; clarify the applicability to commercial and residential development; remove the threshold calculation that triggers the CUP; and modify open space requirements.

VII. HISTORICAL, CULTURAL, AND PALEONTOLOGICAL RESOURCES

Historical and cultural resources are an important part of the County's identity and contribute to the local economy. This section sets forth goals and policy direction for the management and preservation of historical, cultural, and paleontological resources in the County. This section addresses:

- Identifying the County's cultural and historical resources;
- Programs for cultural resources and CEQA; and,
- Cultural, historical, and paleontological resource sites in unincorporated Los Angeles County.

Identifying Cultural and Historical Resources

The County's cultural heritage resources are nonrenewable and irreplaceable. The County aims to promote public awareness of their value, and their public enjoyment should be fostered whenever possible. To this end, the County promotes cooperative efforts between public and private organizations to identify, restore, and preserve these resources.

Cultural heritage resources include historic buildings, structures, artifacts, sites, and districts of historic, architectural, archaeological, or paleontological significance. They may



Hall of Records, An Unidentified Historical Resource

be locations of important events that were turning points in the history of the County. They may also be unique structures or groups of structures possessing distinct architectural features that depict a historical period of the County. Officially recognized resources are integral parts of the built and natural environments, and must be considered in County land use actions. It is recognized that there may be other sites and structures that have not been identified and that have importance to local communities. In such cases, a local-level plan may designate these sites or structures for special land use regulation.



William D. Davies Memorial Building, Altadena

Programs for Cultural and Historical Resources and CEQA

The California Environmental Quality Act (CEQA) provides a mechanism for the consideration of cultural heritage resources as a part of the local environmental review process. The County embraces the importance of protecting cultural heritage resources and is guided in development decisions by federal and state programs that officially recognize these resources. These following legislative tools improve the protection and enhancement of historic and cultural structures:

- **The Los Angeles County Historical Landmarks and Records Commission:** Reviews and recommends cultural heritage resources in the unincorporated area for inclusion in the State Historic Resources Inventory;
- **The California State Parks Department's Office of Historic Preservation:** Maintains the State Historic Resources Inventory, a compilation of all resources formally determined eligible for or listed in the National Register of Historic

Places, the California Register of Historical Resources² or designated as State Historical Landmarks or Points of Historical Interest³;

- **The Federal Archaeological Resources Protection Act of 1979:** Protects archaeological resources and provides requirements for permit issuance to excavate or remove archaeological resources;
- **The Native American Heritage Act of 1992:** Provides guidelines for the protection of Native American remains and artifacts;
- **CEQA:** Provides guidelines for the identification and protection of archaeological sites, artifacts, and paleontological resources. If a project threatens an

² National Register of Historic Places is administered by the U.S. Department of Interior National Park Service under the authority of the Historic Sites Act of 1935 (16 U.S.C. 461-467 (1935) (amended)) and the National Historic Preservation Act of 1966 (16 U.S.C. 470 (1966) (amended)). California Register of Historical Resources (Title 14, Chapter 11.5 (1992)) is administered by the California Department of Parks and Recreation Office of Historic Preservation. Established in 1992, the California Register is the authoritative guide to the State's significant cultural heritage resources. The California Register automatically includes any resource listed in the National Register and all State Historical Landmarks from No. 770 onward. Landmarks from No. 1 through No. 769 that are not listed on the National Register are pending evaluation for inclusion in the California Register.

³ State Historical Landmarks are recognized under the California Registered Historical Landmarks Program (Ca. Pub. Res. Code Section 5021) established in 1949. They are considered to have statewide significance. Points of Historical Interest are recognized under the Points of Historical Interest Program (Ca. Pub. Res. Code Section 5021) established in 1965. Points of Historical Interest are considered to have local (city or county) significance and are not listed in the California Register unless reclassified as State Historical Landmarks. Points of Historical Interest that have not been reclassified as State Historical Landmarks or listed in the National Register are pending evaluation for inclusion in the California Register.

archaeological or paleontological resource, the project is required to provide mitigation measures to protect the site or enable study and documentation of the site. Assessment of these resources requires a survey prepared by a qualified archaeologist or paleontologist; and,

- **The State Historical Building Code (SHBC):**

A set of regulations adopted in 1979⁴ that was created to improve the protection and enhancement of historic structures. The intent of SHBC is to protect California's architectural heritage by recognizing the unique construction problems inherent in historic buildings and offering an alternative code to deal with these problems. The SHBC provides alternative building regulations for the rehabilitation, preservation, restoration, or relocation of structures designated as historic buildings. SHBC regulations are intended to facilitate restoration or accommodate change of occupancy so as to preserve a historic structure's original or restored architectural elements and features.

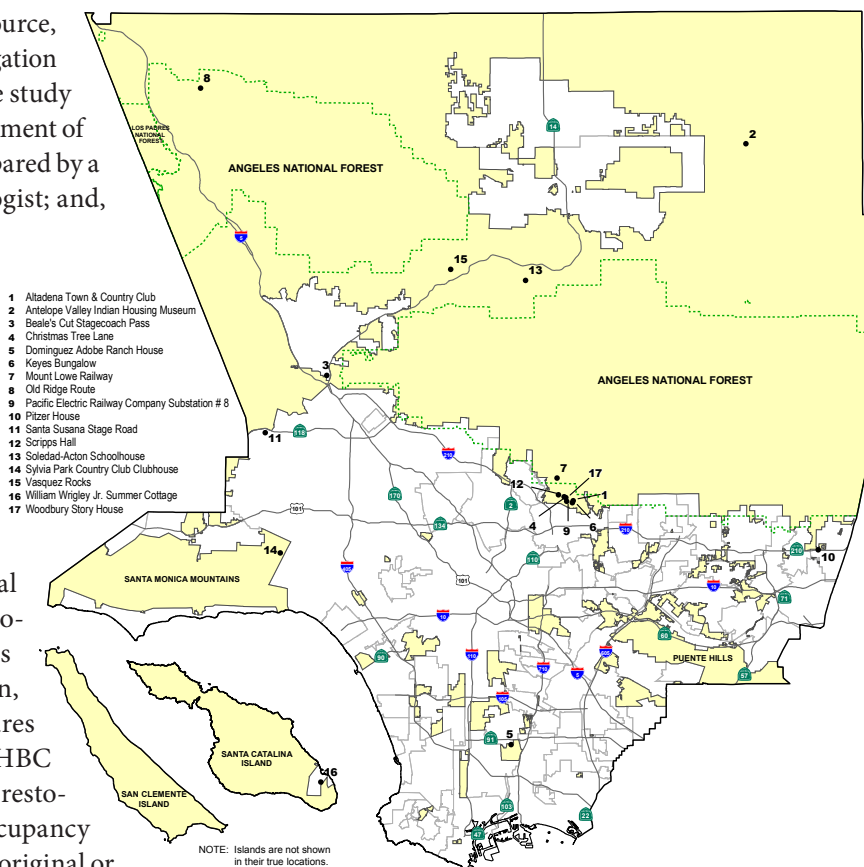


Figure 6.8: Historical and Cultural Resource Sites in Unincorporated L.A. County

Cultural, Historical, and Paleontological Resource Sites in Unincorporated Los Angeles County

The California Register lists 402 significant resources in Los Angeles County. This includes 379 sites listed in the National Register⁵ and 23 State Historical Landmarks above No. 769 that are not listed in the National Register. From the National Register, 18 resources are National Historic Landmarks, a limited designation that has been assigned to fewer than 2500 resources nationwide. Additionally, there are 55 State Historical Landmarks⁶ and 49 Points of Historical Interest⁷ in the County that are not presently listed in the California Register. Among this vast number of resources are missions, the La Brea tar pits, remnants of vast ranchos, routes of early explorers, stagecoach stations,

forts, railroad depots, and the homes of prominent people who shaped local history. Eighteen (18) of these resources are located in the unincorporated areas of the County. The complete list of cultural and historical resources in unincorporated areas of the County can be found in the Technical Appendix to the General Plan. **Figure 6.8** displays the location of the historical and cultural resource sites in the unincorporated County.

Senate Bill (SB) 18

Senate Bill 18 (2004) requires California cities and counties to contact and consult with California Native American tribes prior to amending or adopting a General Plan or Specific Plan, or designating land as open space. SB 18 requires city and county governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning.

4 The SHBC is contained in Part 8, Title 24, California Code of Regulations.

5 <http://www.nr.nps.gov/>.

6 www.ohp.parks.ca.gov. Roberts, George and Jan Roberts. 1994. Discover Historic California, 4th ed. Baldwin Park: GemGuides.

7 California Office of Historic Preservation, Points of Historical Interest.

SB 18 provides California Native American tribes an opportunity to participate in local land use decisions at an early stage in the planning process for the purpose of protecting, or mitigating impacts to sites of cultural significance. Involving tribes early allows for ample consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

The goals and policies which apply to historical, cultural and paleontological resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-12

Protected cultural heritage resources.

- **Policy C/OS 12.1:** Support an inter-jurisdictional collaborative system that protects and enhances the County's cultural heritage resources.
- **Policy C/OS 12.2:** Support the preservation and rehabilitation of historic buildings.
- **Policy C/OS 12.3:** Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
- **Policy C/OS 12.4:** Promote public awareness of the County's cultural heritage resources.

Implementation Action C/OS 12.1

Evaluate the efficacy of the Landmarks Preservation Commission and the designation of historic landmarks within the unincorporated areas of the County.

Guidelines for a Model Project in Cultural Resource Areas

If a CEQA analysis determines that a project will impact a cultural resource area (historic, cultural, or paleontological), the following guidelines will apply:

1. A literature search for valid archaeological or paleontological surveys shall be conducted (for each initial study of a public or private project).
2. If an impact or potential impact to a cultural resource is anticipated, a study of the project site shall be made by a qualified archaeologist or paleontologist who shall determine the scientific value of finds, if any, and a recommendation as to their preservation or disposition.
3. The County Historical Landmarks Commission must be notified of all cultural, historical, or paleontological findings.
4. All significant impacts to cultural resource sites must be mitigated to the greatest extent feasible, and a reasonable period of time must be allowed to salvage the site.
5. The integrity of significant historical features of the structure and/or site should be maintained to the largest extent possible.
6. The integrity of sightlines to the structure or site should be maintained.
7. Development adjacent to a cultural resource site should consider design guidelines and appropriate building design, setbacks, landscaping, and other factors that will protect the integrity of the cultural resource area.
8. Materials collected during surface surveys or salvage operations should be donated to an appropriate nonprofit institution. In the event the property owner wishes to retain possession of the artifacts found, it is desirable that archaeologists or paleontologist be allowed to study and photograph the artifacts.

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VIII. WATER RESOURCES

The arid climate and landscape of Los Angeles County requires that water be managed as an invaluable resource. The County recognizes that the effective management and preservation of its water resources is vital to preserving a high quality of life for County residents and businesses.

This section of the Conservation and Open Space Element explores water resources and water quality issues in the County, and sets forth goals and policy direction for the management of the County's water resources.



Malibu Creek State Park

Background

Federal and State Water Plans

The federal government established the Clean Water Act (CWA) in 1972 to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” with the goal that “wherever attainable water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water.” The State Water Resources Control Board (State) and the Regional Water Quality Control Boards, through the Ocean

Plan and the Basin Plan, respectively, implement portions of the CWA by designating water-bodies and their existing and potential uses as beneficial uses and set forth policies that protect such beneficial uses from degradation.

In 1949, nine (9) California Regional Water Quality Control Boards were established to protect the quality of receiving waters from adverse impacts of wastewater discharges. The Porter-Cologne Water Quality Act, also known as the California Water Code, enacted in 1969 by the State of California authorized the State to adopt, review, and revise policies for all water-bodies in the state. The State also directed the Regional Boards to develop the Basin Plans to address water quality issues and protection for inland water-bodies. The Basin Plan for Los Angeles was adopted in 1975 and is comprised of the Water Quality Control Plan for the Santa Clara River Basin and the Water Quality control Plan for the Los Angeles Basin with the latest amendment to the plan completed in 1994. Antelope Valley, in the northeastern portion of the county, is under the jurisdiction of the Lahontan Regional Water Quality Control Board. The Lahontan Basin plan took effect in 1995, replacing three earlier plans.

Under the California Water code, the State Water Resources Control Board adopted the California Ocean Plan in 2005 to protect water quality for the use and enjoyment of the public through the control of the discharge of waste into the ocean. The beneficial uses to be protected include “industrial



Whittier Narrows

water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish harvesting.”

The Los Angeles and Lahontan Regional Boards’ Basin Plans and the State Water Board’s Ocean Plan protect the water-bodies by designating them with beneficial uses and implementing programs to protect such uses. There are 24 beneficial uses developed and defined by the State and the Regional Boards designated to water-bodies as “existing” or “potential”. Examples of beneficial uses include: municipal and domestic supply, water contact recreation, and preservation of biological habitats. A complete list of all the beneficial uses can be found in the Water Quality Control Plan Los Angeles Region, 1994, the Water Quality Control Plan for the Lahontan Region, 1995, and the California Ocean Plan, 2005 (http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/basin_plan/basin_plan_documentation.shtml; http://www.swrcb.ca.gov/rwqcb6/water_issues/programs/basin_plan/references.shtml; <http://www.swrcb.ca.gov/plnspols/docs/oplans/oceanplan2005.pdf>).



LA County Stream



LA County Flood Control Districts Spillway

Integrated Regional Water Management Plans (IRWMPs)

Integrated Regional Water Management Plans (IRWMPs) define a clear vision and strategy for the sustainable management of water resources within a specific region delineated by one or more watersheds. IRWMPs generally contain an assessment of current and future water demand, water supply, water quality, and environmental needs. They address the challenges for delivering a stable and clean supply of water for the public, addressing stormwater and urban runoff water quality, providing flood protection, meeting water infrastructure needs, maximizing the use of reclaimed water, enhancing water conservation, and promoting environmental stewardship.

During the planning process, all stakeholders, including water distributors and purveyors, regional waterworks and sanitation districts, local public works departments, environmental organizations, non-profits, and other vested interests work together to develop communal goals, objectives, and strategies. Since water related issues are addressed on a regional, watershed basis, these plans are instrumental in building consensus amongst the various stakeholders in the development and prioritization of an action plan that is complementary and leverages inter-jurisdictional cooperation, resources, and available funding.

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Castaic Lake Reservoir

There are three IRWMPs in the County:

- Antelope Valley IRWMP;
- Upper Santa Clara River IRWMP; and,
- Greater Los Angeles County IRWMP.

For more information on the IRWMPs, please go to www.avwaterplan.org, www.scrwaterplan.org, or www.lawaterplan.org, respectively.

Water Sources

The following discussion outlines the primary types of water resources in the County.

Major Surface Water

Most major surface waters serve as storage facilities. Lakes and reservoirs receive rainwater and snowmelt from rivers, streams, and imported supplies from aqueducts, holding them until the water is needed. Most of the County's major surface waters are controlled by man-made facilities. For example, a series of dams and spreading grounds are used to capture close to 80 percent of the water that flows from the San Gabriel Mountains and through the San Gabriel River. Some of these surface waters support fish and wildlife and provide recreation areas for County residents that are compatible with flood management and water conservation operations. The County protects these areas by designating them open space and limiting the type and amount of land use activities that occur in their vicinity.

Due to the County's climate patterns, streams and rivers receive intermittent heavy winter rainstorms and little summer or fall precipitation, which affects the consistency of water flow. Small tributaries are also highly sensitive to pollution, and the cumulative impacts of polluted runoff and unnatural levels of silt degrades the water quality of these waterways to a much greater extent than a high volume river with continuous flow. The County is working, within its jurisdiction, to improve the health of rivers, streams, and minor tributaries to enhance overall water resources, groundwater recharge, and wildlife habitat.

Groundwater

Groundwater is a crucial component of local fresh water supplies. Groundwater is the water beneath the earth's surface that can be collected with wells, tunnels, or drainage galleries, or that flows naturally to the earth's surface via seeps or springs. Eight (8) major groundwater basins provide about one-third of the County's overall water demand, except during times of drought. A reduction or decline in groundwater quantity or quality is detrimental to water users countywide, especially to the hundreds of households in rural areas who depend solely on private wells.

Water accumulates beneath the ground in saturated zones, or aquifers, which are referred to as groundwater basins. These aquifers can hold millions of acre-feet (AF) of water and extend for miles. Basins fill with water as a result of snowmelt, rain, and surface flow percolating through

the soil. A major issue in the County is that most of the groundwater basins never fully recharge because the rate of water extraction is much higher than the rate of natural recharge.

In the southern part of the County, the natural recharge process is severely hampered by impervious surfaces (surfaces that do not permit the absorption of fluids) associated with urbanization and development. In the open space areas of the northern part of the County where substantial percolation does occur, water demand is so great that annual precipitation and spreading ground operations are not sufficient to recharge the basins.

In an effort to mitigate groundwater depletion, water agencies throughout the County have developed strategies to artificially recharge groundwater. One strategy purchases imported water or utilizes recycled water and injects it back into the water basins. Another strategy diverts imported water to designated spreading grounds, where it can percolate back into the water basins. In an effort to reduce imported water supplies, the County also diverts some of its treated stormwater into spreading grounds to replenish the groundwater supply.

Groundwater Pollution

Because approximately one-third of the County's local water supply is drawn from groundwater basins, the quality of this water source is critical. Contamination from past



Stream With Concrete Slabs

industrial and agricultural practices, saltwater intrusion, urban runoff and leaking from contaminated underground storage tanks has decreased useable groundwater supplies throughout the County. Federal and state agencies such as the Environmental Protection Agency and Regional Water Quality Control Boards are working to improve the quality of groundwater by identifying contaminants, initiating clean up efforts and bringing enforcement actions against polluters. To reduce pollution in the future, each city and the County of Los Angeles are implementing water pollution prevention programs appropriate for their jurisdiction.

Recycled Water

Recycled water is used primarily for recharging groundwater aquifers through spreading operations and injection at seawater barriers. Other uses of recycled water include irrigation of landscaping, most commonly in parks, golf courses, and for roadway medians; supplying industrial processes, such as cooling and transportation, washing, and rinsing; filling artificial and decorative ponds and lakes; and flushing toilets in large, non-residential buildings.



LA County Flood Control Districts Dam and Recharge Area

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Los Angeles River

The County Sanitation Districts operate reclamation plants throughout the County and are the largest producers of recycled water. Other producers of recycled water include the cities of Burbank, Glendale, Los Angeles, Santa Monica, and the Central, Las Virgenes, and West Water districts. Three of these plants in the southern part of the County are capable of delivering over 50,000 acre-feet of treated water each year to spreading grounds and injection wells to combat salt-water intrusion into groundwater basins from the Pacific Ocean. In the Antelope Valley, recycled water is used for agriculture and supports large bird populations at Piute Ponds.

Water Conservation

Conservation is a critical component of water resource management and is, in effect, another way to create additional water supply. Voluntary conservation measures by industries and residents have been successful in the past, particularly with regard to outdoor water use. Two-thirds of residential water use is attributed to landscape maintenance, which makes conservation measures such as planting drought-tolerant, indigenous plants (a practice known as xeriscaping), an important component of conservation policy.

The conservation of the County's water supply is a primary goal of local and County officials. To reduce the County's dependence on imported water, County agencies are establishing various conservation programs to

address this significant policy issue. One example from the Department of Public Works is the creation of water reclamation projects and groundwater recharge facilities to capture stormwater runoff. In the year 2000 alone, County conservation efforts captured 220,000 acre-feet of local stormwater runoff that was valued at \$80 million dollars.

In addition to stormwater runoff, the General Plan supports conservation efforts that focus on curbing demand by reducing consumption through technological advances, such as aerators and motion sensors on low flush toilets and stalls, on-site grey water reclamation and dual plumbing, and promoting xeriscaping. At the same time, educational campaigns are being created to discourage wasteful water consumption. While current water supply is adequate, better water management and conservation efforts are necessary to stretch the available supply if the County is to accommodate future growth. There are several policies in this General Plan that were created to promote water conservation efforts throughout the County.

Impaired Water Bodies

Section 303(d) of the federal Clean Water Act (CWA) requires states to identify and establish a list of water bodies for which technology-based effluent limitations required by section 301 of the CWA are not stringent enough to attain and maintain applicable water quality standards. These water bodies on the 303(d) list are termed "impaired water bodies". For each water quality limited segments of water bodies identified in the 303(d) list, states are required to develop what is called "total maximum daily load (TMDL)", which is the maximum amount of a pollutant that a water body can receive and still attain water quality standards. The pollution above that maximum has to be "budgeted" by allocating it among the various sources of the pollutant in order to regain the beneficial uses of the water body.

The majority of the water bodies in Los Angeles County, including rivers, lakes, coastal estuaries, bays, and beaches are in violation of the CWA and are placed on the 303(d) list. More than a dozen of different pollutants including

metals, nutrients, bacteria, organics, pesticides, trash, and other contaminants are found in the County's water bodies in amounts significantly above established water quality standards.

TMDL Implementation Plan

The TMDL Implementation Plan provides a schedule for responsible jurisdictions to implement systems, programs, and Best Management Practices (BMPs) to comply with progressive pollutant reduction schedules. More than 35 TMDLs are expected to be established in Los Angeles County by 2012. As of March 2008, about 15 TMDLs are already in effect, and the rest are being developed by the Los Angeles Regional Water Quality Control Board. The development of each TMDL results in an amendment of the Basin Plan, and subsequent inclusion into the National Pollutant Discharge Elimination System (NPDES) Permit program. The County recognizes the impact that urbanization has caused on our water resources and the environment, and is seriously engaged in taking actions to mitigate the problems.

Water Quality

The U.S. Environmental Protection Agency has found that close to 218 million Americans live within 10 miles of a polluted lake, stream, river, or coastline, and most of Los Angeles County falls within this category. The cost of cleaning polluted water bodies is significant. Water quality regulation and implementation programs are beginning

to make a difference, but without major public awareness and behavioral changes, the clean up process will remain an ongoing challenge.

The Federal Water Pollution Control Act (Clean Water Act) mandates that states develop water quality programs to protect the nation's water supply. In the State of California, this responsibility rests with the State Water Resources Control Board (SWRCB) and its nine (9) Regional Water Quality Control Boards (RWQCBs). Statewide policies and regulations are set by the SWRCB and then implemented by the RWQCBs through Water Quality Control Plans, also known as Basin Plans.

Regional Water Quality Control Boards

Two regional water quality control boards work with the County and local water purveyors to achieve the objectives set forth in their Basin Plans. The Los Angeles Regional Water Quality Board monitors most of the County, with the exception of the Antelope Valley, which is monitored by the Lahontan Regional Water Quality Board.

Basin Plans identify water pollutants and impaired stream courses in an effort to reduce illness in humans, destruction of riparian and marine habitats, and the loss of local tax revenue as a result of decreased tourism and increased remediation costs. Management of pollutants is set forth within the Basin Plan under NPDES.

National Pollutant Discharge Elimination System (NPDES)

In 1987, an amendment to the Clean Water Act effectively prohibited the discharge of pollutants to waters of the United States from stormwater, unless such discharge is in compliance with a National Pollutant Discharge Elimination System Permit. The NPDES is a permitting program that established a framework for regulating municipal, industrial, and construction stormwater discharges into surface water bodies and stormwater channels.

The Los Angeles and Lahontan Regional Water Quality Control Boards are responsible for implementing the federally mandated NPDES program in the County through the adoption of an Order, which is effectively the NPDES Permit for that region. The Los Angeles Regional Board's Permit designates 84 cities within the Board's region as permittees, and the County of Los Angeles as the Principal Permittee of the NPDES Permit. The NPDES Permit defines the responsibilities of each permittee to control pollutants, including



Polluted Waterways

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the adoption and enforcement of local ordinances and monitoring programs. The principle permittee is responsible for coordinating activities to comply with the requirements set forth in the Permit, but is not responsible for ensuring compliance of any other permittee. The County's Stormwater Ordinance requires that the discharge, deposit, or disposal of any stormwater and/or runoff to storm drains must be covered by a NPDES permit.

For the unincorporated areas of the County, in accordance with the NPDES Permit, the County implements a Standard Urban Stormwater Mitigation Plan (SUSMP) at the project-site level to address pollutants generated by specific activities and types of development. The main purpose of this planning program is to identify new construction and redevelopment projects that could contribute to stormwater pollution, and to mitigate run-off from those projects by requiring that certain Best Management Practices be implemented during and after construction. Moreover, the SUSMP prevents erosion by controlling runoff rates, protecting natural slopes and channels, and conserving natural areas.

Further information on the county's two (2) Regional Water Quality Control Boards and their NPDES programs can be found on the State of California Environmental Protection Agency website, located at <http://www.swrcb.ca.gov/rwqcb4/> (Los Angeles) and <http://www.swrcb.ca.gov/rwqcb6/> (Lahontan).

Watershed Resources

A watershed is an area or region that, by its land characteristics, contributes to the flow of water, sediments, and dissolved materials from the land into a common river, lake, groundwater basin, ocean, or other water body. A watershed encompasses all interrelated functions of the water cycle, surface flow, soil movement, vegetation, and wildlife occurring in a land area that is naturally bounded by mountain ridgelines. It is a vast undertaking to analyze the health of watersheds. However, individual watersheds are monitored to better understand the connections between their natural functions and human activities.

Watershed Management

Watershed management is a comprehensive approach to effectively protect and restore a watershed's natural resources and water quality, particularly the biological function of riparian habitat and aquatic systems. Watershed management integrates flood protection with water quality and conservation, and preserves existing open space for habitat and recreation.

Because a watershed encompasses many jurisdictions, water quality and natural resource issues are best managed at a regional or watershed level. The Los Angeles County Department of Public Works has taken a leading role in engaging local stakeholders and jurisdictions in an effort to generate partnerships, collaborate with educational and professional institutions, and develop and implement Watershed Master Plans throughout the County. These plans incorporate measures to maintain flood protection standards and provide

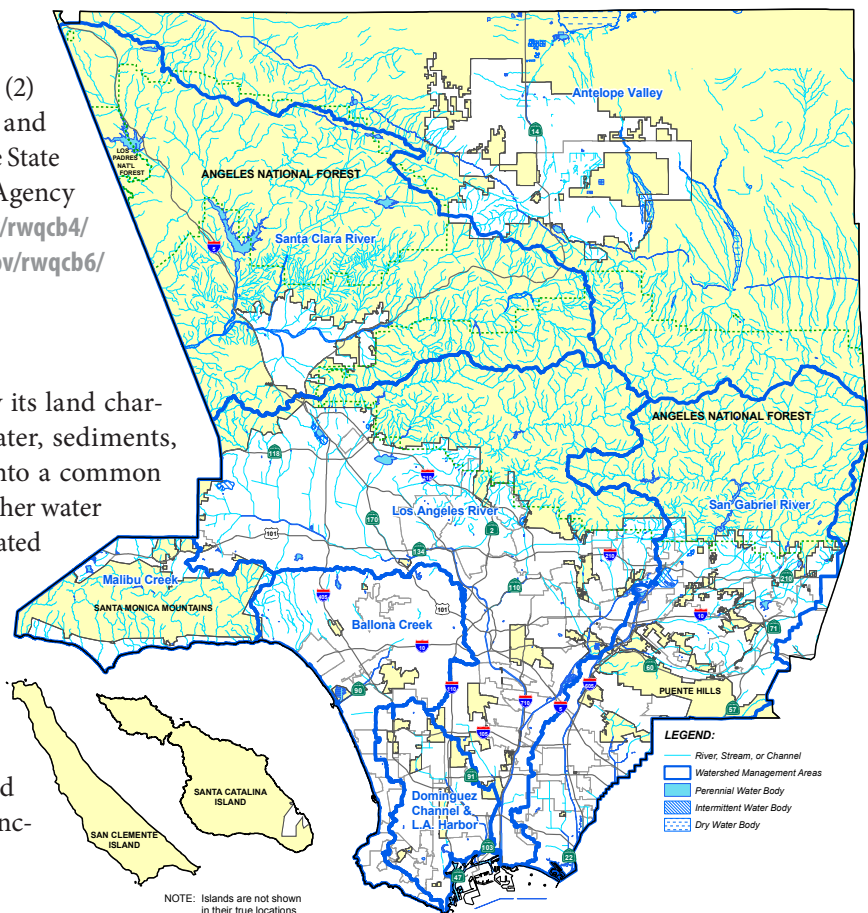


Figure 6.9: Significant Watersheds in L.A. County

assistance in the event of flooding, encourage watershed management practices, and improve the quality of water that flows to rivers, lakes, and the ocean.

Watershed Impacts

The General Plan recognizes the importance of utilizing a watershed-based planning approach. Rivers, streams, and other drainage courses can be greatly affected by land use planning within the watershed. The specific issues impacting water bodies within each watershed should be taken into consideration, including pollutants of concern, TMDLs, natural ecology, and potential for hydromodification.

Hydromodification

Hydromodification is one of the leading sources of impairment in streams, lakes, estuaries, aquifers, and other water bodies in the United States. Three major types of hydromodification activities, channelization and channel modification, dams, and stream bank and shoreline erosion, change a water body's physical structure as well as its natural function. These changes can cause problems such as changes in flow, increased sedimentation, higher water temperature, lower dissolved oxygen, degradation of aquatic habitat structure, loss of fish and other aquatic populations, and decreased water quality. It is important to properly manage hydromodification activities to reduce non-point source pollution in surface and ground water. The County is currently working on new standards which will address hydromodification impacts to natural streams.

Los Angeles County Watersheds

There are several major watersheds, comprised of many sub-watersheds, in Los Angeles County, as shown in **Figure 6.9**. The Technical Appendix to the General Plan contains a thorough discussion of the following watersheds:

- Los Angeles River Watershed;
 - Dominguez Channel Sub-Watershed
- San Gabriel River Watershed;
- Santa Monica Bay Watershed;
 - Malibu Creek Sub-Watershed;
 - Ballona Creek Sub-Watershed;
- Santa Clara River Watershed; and,
- Antelope-Fremont Valleys Watershed.

The goals and policies which apply to water resources are:

Goals, Policies, and Implementation Actions

Goal C/OS-13

A protected supply of water resources.

- **Policy C/OS 13.1:** Comply with requirements of adopted Municipal Separate Storm Sewer System, General Construction, and point source NPDES permits.
- **Policy C/OS 13.2:** Full compliance of NPDES stormwater permit requirements.
- **Policy C/OS 13.3:** Full compliance with all approved TDML implementation and compliance plans for impaired water bodies.
- **Policy C/OS 13.4:** Strictly manage the use of septic systems, especially adjacent to water bodies.
- **Policy C/OS 13.5:** All development activities should be discouraged from encroaching on the 100-year floodplain, and regulated to ensure the safety of County residents in the 200-year floodplain.

Implementation Action C/OS 13.1

Create a floodplain management ordinance that adequately protects floodplains from the encroachment by development, preserves natural recharge areas, and allows passive recreation along the County's waterways.

Implementation Action C/OS 13.2

Prepare Watershed and River Master Plans to enhance aquatic habitats, promote recreational opportunities, and restore natural features.

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